Seed Enhancements LLC, DBA- Summit Seed Coatings
P.O. Box E
Caldwell, ID 83606

RECEIVED

FEB 15 2008

Department of Environmental Quality
State Air Program

February 14, 2008

Mr. Bill Rogers
Department of Environmental Quality
Air Quality Division
Stationary Source Program
1410 North Hilton
Boise, Idaho 83706-1255

Re: Request for Pre-Permit Construction Approval Application
Seed Enhancements LLC, DBA- Summit Seed Coatings

Dear Mr. Rogers:

Enclosed is a pre-permit construction approval application addressing Summit Seed Coatings (Summit) proposal to construct an additional seed coating line at its facility in Caldwell, Idaho. Summit is requesting DEQ process this application in accordance with the 15-day pre-permit construction approval process contained in IDAPA 58.01.01.213. As required in IDAPA 58.01.01.213.01a., the permit to construct application is being submitted concurrently with this pre-permit construction request.

The enclosed pre-permit construction approval application has been prepared in accordance with DEQ's January 2001 guidance document "Pre-permit Construction Approval Guidance Document." On November 19, 2007 Summit and JBR Environmental Consultants, Inc. held a meeting with DEQ to discuss that a request for pre-permit construction approval would be forthcoming. Also, in accordance with the requirements for a 15-day pre-permit construction approval, Summit has advertised in the Idaho Press- Tribune on January 8, 2008 an invitation to attend a public information meeting to be held at the La Quinta Inn in Caldwell, Idaho on January 18, 2008 at 1:00 pm. The meeting was held however there was no public attendance.

This project meets the eligibility requirements for pre-permit construction approval because the proposed facility is a minor source and does not plan to utilize emission offsets or netting, and the emissions from the facility are unlikely to impact Class I air quality related values. This satisfies the requirement that a certified proof of pre-permit construction eligibility must be submitted with the pre-permit construction approval application in accordance with IDAPA 58.01.01.213.01.

This submittal includes the PTC application, a modeling section that demonstrates compliance with all applicable air quality rules, detailed emission calculations for the proposed facility, and a copy of the newspaper announcement for the public information meeting. Additionally, this submittal contains an electronic copy of the modeling files that support this application. The

$1,000 PTC application fee was submitted on January 12, 2008 and a copy of the receipt is also included in this submittal.

In accordance with IDAPA 58.01.01.213.01.d, I hereby certify that the Summit Seed Coatings facility will comply with any restrictions it has imposed on potential to emit such that emissions will be below major source levels, including emission limitations, operating limitations, and monitoring and reporting requirements.

Pursuant to IDAPA 58.01.01.123, I hereby certify that, based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate, and complete.

Please feel free to myself at 208.455.8009 or Melissa Armer of JBR Environmental Consultants at 208.853.0883 if you have any questions or need additional information.

Sincerely,

Stuart Barclay
Summit Seed Coatings

Enclosures

Cc: JBR Environmental Consultants, Inc.

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 NORTH HILTON, BOISE, ID 83706 · (208) 373-0502

C. L. "BUTCH" OTTER, GOVERNOR
TONI HARDESTY, DIRECTOR

December 12, 2007

Chris Johnson
JBR
Boise, Idaho

RE: Modeling Protocol for the Summit Seed Coatings Facility Located in Caldwell, Idaho

Chris:

DEQ received your dispersion modeling protocol on November 28, 2007. The modeling protocol was submitted on behalf of Summit Seed Coatings. The modeling protocol proposes methods and data for use in the ambient impact analyses of a Permit to Construct application for modifications at their facility in Caldwell, Idaho.

The modeling protocol has been reviewed and DEQ has the following comments:

- Comment 1: Given the magnitude of emissions associated with the proposed facility, as presented in the submitted protocol, only minimal documentation/justification of stack parameters are necessary. If emissions rates change substantially and/or modeling shows that impacts are approaching applicable standards, more thorough documentation/justification would be needed.

- Comment 2: Please verify that all emissions sources have been identified and included in the modeling analyses, or justification of excluding sources has been provided. I would expect a seed treatment facility to have fugitive emissions associated with material handling operations (seed delivery, loadout, etc.)

DEQ's modeling staff considers the submitted dispersion modeling protocol, with resolution of the additional items noted above, to be approved. It should be noted, however, that the approval of this modeling protocol is not meant to imply approval of a completed dispersion modeling analysis. Please refer to the *State of Idaho Air Quality Modeling Guideline*, which is available on the Internet at http://www.deq.state.id.us/air/permits_forms/permitting/modeling_guideline.pdf, for further guidance.

To ensure a complete and timely review of the final analysis, our modeling staff requests that electronic copies of all modeling input and output files (including BPIP and AERMAP input and output files) are submitted with an analysis report. If DEQ provided model-ready meteorological data files, then these do

not need to be resubmitted to DEQ with the application. If you have any further questions or comments, please contact me at (208) 373-0112.

Sincerely,

Kevin Schilling
Stationary Source Air Modeling Coordinator
Idaho Department of Environmental Quality
208 373-0112

This checklist is designed to aid the applicant in submitting a complete pre-permit construction approval application.

I. Actions Needed Before Submitting Application

☒ Refer to the Rule. Read the Pre-Permit Construction requirements contained in IDAPA 58.01.01.213, Rules for the Control of Air Pollution in Idaho.

☒ Refer to DEQ's Pre-Permit Construction Approval Guidance Document. DEQ has developed a guidance document to aid applicants in submitting a complete pre-permit construction approval application. The guidance document is located on DEQ's website (go to http://www.deq.idaho.gov/air/permits_forms/permitting/ptc_prepermit_guidance.pdf

☒ Consult with DEQ Representatives. Schedule a meeting with DEQ to discuss application requirements before submitting the pre-permit construction approval application. The meeting can be in person or on the phone. Contact DEQ's Air Quality Permit Coordinator at (208) 373-0502 to schedule the meeting. Refer to IDAPA 58.01.01.213.01b.

☒ Schedule Informational Meeting. Schedule an informational meeting before submitting the pre-permit construction approval application for the purposes of satisfying IDAPA 58.01.01.213.02.a. The purpose for the informational meeting is to provide information about the proposed project to the general public. Refer to IDAPA 58.01.01.213.01.c.

☒ Submit Ambient Air Quality Modeling Protocol. It is recommended that an ambient air quality modeling protocol be submitted to DEQ at least two (2) weeks before the pre-permit construction approval application is submitted. Contact DEQ's Air Quality Modeling Coordinator at (208) 373-0502 for information about the protocol.

☒ Written DEQ Approved Protocol. Written DEQ approval of the modeling protocol must be received before the pre-permit construction approval application is submitted. Refer to IDAPA 58.01.01.213.01.c.

II. Application Content

Application content should be prepared using the checklist below. The checklist is based on the requirements contained in IDAPA 58.01.01.213 and DEQ's Pre-Permit Construction Approval Guidance Document.

☒ Pre-Permit Construction Eligibility and Proof of Eligibility. Pre-permit construction approval is available for minor sources and for minor modifications only. Emissions netting and emissions offsets are not allowed to be used. A certified proof of pre-permit construction eligibility must be submitted with the pre-permit construction approval application. Refer to IDAPA 58.01.01.213.01.

☒ Request to Construct Before Obtaining a Permit to Construct. A letter requesting the ability to construct before obtaining the required permit to construct must be submitted with the pre-permit construction approval application. Refer to IDAPA 58.01.01.213.01.c.

☒ Apply for a Permit to Construct. Submit a Permit to Construct application using forms available on DEQ's website at http://www.deq.idaho.gov/air/permits_forms/forms/ptc_general_application.pdf. Refer to IDAPA 58.01.01.213.01.a.

☒ Permit to Construct Application Fee. The permit to construct application fee must be submitted at the time the original pre-permit construction approval application is submitted. Refer to IDAPA 58.01.01.224.

☒ Notice of Informational Meeting. Within ten (10) days after the submittal of the pre-permit construction approval application, an information meeting must be held in at least one location in the region where the stationary source will be located. The information meeting must be made known by notice published at least ten (10) days before the information meeting in a newspaper of general circulation in the county in which the stationary source will be located. A copy of this notice, as published, must be submitted with the pre-permit construction approval application. Refer to IDAPA 58.01.01.213.02.a.

☒ Process Description(s). The process or processes for which pre-permit construction approval is requested must be described in sufficient detail and clarity such that a member of the general public not familiar with air quality can clearly understand the proposed project. A process flow diagram is required for each process for which pre-permit construction approval is requested. Refer to IDAPA 58.01.01.213.01.c.

☒ Equipment List. All equipment that will be used for which pre-permit construction approval is requested must be described in detail. Such description includes, but is not limited to, manufacturer, model number or other descriptor, serial number, maximum process rate, proposed process rate, maximum heat input capacity, stack height, stack diameter, stack gas flowrate, stack gas temperature, etc. All equipment that will be used for which pre-permit construction approval is requested must be clearly labeled on the process flow diagram. Refer to IDAPA 58.01.01.213.01.c.

☒ Scaled Plot Plan. It is recommended that a scaled plot plan be included in the pre-permit construction approval application and must clearly label the location of each proposed process and the equipment that will be used in the process.

☒ Proposed Emissions Limits and Modeled Ambient Concentration for All Regulated Air Pollutants. All proposed emission limits and modeled ambient concentrations for all regulated air pollutants must demonstrate compliance with all applicable air quality rules and regulations. Regulated air pollutants include criteria air pollutants (PM_{10}, SO_x, NO_2, O_3, CO, lead), toxic air pollutants listed pursuant to IDAPA 58.01.01.585 and 586, and hazardous air pollutants listed pursuant to Section 112 of the 1990 Clean Air Act Amendments (go to http://www.epa.gov/ttn/atw/188polls.html). Describe in detail how the proposed emissions limits and modeled ambient concentrations demonstrate compliance with each applicable air quality rule and regulation. It is requested that emissions calculations, assumptions, and documentation be submitted with sufficient detail so DEQ can verify the validity of the emissions estimates. Refer to IDAPA 58.01.01.213.01.c.

☒ Restrictions on a Source's Potential to Emit. Any proposed restriction on a source's potential to emit such that permitted emissions will be either below major source levels or below a significant increase must be described in detail in the pre-permit construction approval application. Refer to IDAPA 58.01.01.213.01.d.

☒ List all Applicable Requirements. All applicable requirements must be cited by the rule or regulation section/subpart that applies for each emissions unit. Refer to IDAPA 58.01.01.213.01.c.

☒ Certification of Pre-Permit Construction Approval Application. The pre-permit construction approval application must be signed by the Responsible Official and must contain a certification signed by the Responsible Official. The certification must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Refer to IDAPA 58.01.01.213.01.d and IDAPA 58.01.01.123.

☒ Submit the Pre-Construction Approval Application. Submit the pre-permit construction approval application to the following address:

Department of Environmental Quality
Air Quality Division
Stationary Source Program
1410 North Hilton
Boise, ID 83706-1255

Pre-Permit Application for the Authority to Construct

Seed Enhancements LLC, DBA Summit Seed Coatings

Prepared for:
Summit Seed Coatings
P.O. Box E
710 N. 11th Avenue
Caldwell, ID 83605

Prepared by:
JBR Environmental Consultants, Inc.
7669 West Riverside Drive, Suite 101
Boise, ID 83714

February 2008

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Appendix B	Process Flow Diagram and Scaled Plot Plan
Appendix C	PTC Application Forms
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Appendix F	MSDS Sheets

EXECUTIVE SUMMARY

Summit Seed Coatings (Summit) proposes to construct a new production line, at their existing facility if Caldwell, Idaho. The new production line will be similar to the existing production line but will utilize different coating equipment that is expected to provide higher coating transfer efficiency to the seed.

Emission sources from the new production line will include a baghouse, a fluidized bed dryer, limestone storage silo, and a new boiler that will replace the existing 91 gallon hot water boiler. The replacement of the 91 gallon hot water boiler along with a requested permit limit on the pressure washer hours, and a slight increase in vehicle fugitive emissions will be the only modification that affects existing permitted equipment. There will be no other changes to the process or equipment currently permitted under permit T2-0300054.

Summit will have a controlled potential to emit (PTE) below 100 tons per year (tpy) for particulate matter (PM), particulate matter with less than ten microns in diameter (PM10), oxides of nitrogen (NOx), sulfur dioxide (SO2), volatile organic compounds (VOC), and carbon monoxide (CO). The facility will remain minor with respect to both Title V permitting and New Source Review.

1.0 PROCESS DESCRIPTION

1.1 General Overview

The new seed coating line to be constructed by Summit Seed Coatings is a one step, batch to line process. It is intended to coat a large volume of seed, inexpensively, while loading relatively large amount of coating material by weight. The sources of emissions from the new seed coating line are identified below and the relevant stages of the process are described below:

Equipment List

- New Seed Coating Line
- Oliver Fluidized Bed Dryers 8.0 MMBtu/hr total
- 9.5 Horsepower Hot Water Boiler
- Limestone Storage Silo
- Carbotech® Pulse Baghouse

1.2 Seed Handling

Seed is delivered to the facility in prepackaged bags, totes, or large storage boxes. The seed that arrives in bags or totes is unloaded into large storage boxes prior to being transferred into the coating line. The prepackaged seed is precleaned, prescreened and preseparated prior to being packaged and received at the Summit facility. The transfer of seed from bags and totes primarily occurs indoor. During the summer months, or weather permitting, the seed may be transferred from bags and totes to large boxes outdoors 1-2 times per week. Any fugitive dust emissions from the transfer of seed to large boxes are expected to be negligible since the seed has been precleaned, prescreened and preseparated. The transfer of seed from the boxes into the coating line occurs indoors at all times. Fugitive dust emissions resulting from vehicle traffic on paved roads at the facility however, are expected to increase do to the addition of the new production line.

1.3 Preparatory Mixing

Adhesive: A water soluble, polymeric adhesive in powdered form is dissolved in water using a steam jacketed kettle and agitation. A new 9.5 horsepower hot water boiler will provide heat for adhesive dissolution. The new 9.5 horsepower hot water boiler will also replace the existing 91 gallon hot water boiler and will combust natural gas.

The adhesive is pumped from the main mixing tanks to smaller slurry mixing tanks, where it can be combined with seed enhancements such as inoculants, systemic fungicide or other ingredients as appropriate. Table 1-1 below lists the seed enhancement materials that will be used in the new coating line. Each customer and type of seed has its own specifications for the enhancement materials that are applied to the seed. Consequently, there are numerous combinations of the various seed enhancement materials processed at a given time. The maximum seed enhancement application rate during any given hour was assumed for emission calculations.

Powder: Limestone (calcium carbonate) is mixed in a horizontal paddle mixer manufactured by the Marion Company, and consists of very finely powdered limestone, combined with other ingredients which may be appropriate: such ingredients may be ground peat for legumes, or iron chelate and calcium sulfate. The limestone storage silo vents to the new pulse baghouse.

1.4 Application of the Coating:

Seed is conveyed via elevator to a Rotostat coating machine. This machine is a vertical drum with a rotating floor, its rotation causes the seed to roll against its inside wall. A spinning disc in the center of the drum atomizes the adhesive that is applied to it, coating the seed along the inside wall with adhesive. The powdered limestone is then introduced; it adheres to the seed and is compacted to it by the centrifugal force of the rolling action of the seed against the wall of the drum. All ingredients are mixed together until optimum consistency is reached.

Drying: The seed is fed from the Rotostat coating machine to four fluidized bed dryers in series. The first three fluidized bed dryers will be fed with three heaters at a controlled temperature, with a combined maximum heat rating below 8 MMBtu/hr. Each of the three heaters will combust natural gas, drying the seed to the specified moisture. The fourth dryer is fed by ambient air to cool the seed before screening and packaging. All air that has passed through the dryers is drawn into a Carbotech® pulsed baghouse, and any particulate matter is removed from the air before it escapes into the atmosphere.

Screening: The seed is screened across an "over-under" screen machine, common to many seed cleaning plants. The machine screens out the "lumps," which may have formed in the process, and the "fines," or dust which was too heavy to be picked up by the bag houses and has accompanied the seed after drying. After screening, the seed is ready for packaging and shipping as the customer may direct.

A process flow diagram of Summit's new seed coating line is presented in Appendix B along with a scaled plot plan showing the location of the proposed process equipment. Material safety data sheets for all ingredients used are included in Appendix F.

Table 1-1 Processed Material Parameters - Summit Seed Coatings

Name of Material	Manufacturer
Calcium Carbonate White (Limestone)[a]	Columbia River Carbonates
Calcium Carbonate Grey (Limestone)	J.A. Jack & Sons, Inc.
Calcium Sulfate (Gypsum)[b]	Diamond K, Inc.
Peat Based Inoculant[c]	EMD/ Nitragen Co.
Polyvinyl Alcohol[d]	Kell Chemical
Mica (Gimsheen 40)[e]	Georgia Industrial Minerals, Inc
Maxim 4FS Fungicide[f]	Syngenta
Sodium Molybdate[g]	North Metal & Chemical
42-S Thiram Fungicide[h]	Bayer CropScience
Apron XL LS	Syngenta
Potassium Sulfate (Sulfate of Potash)	Diamond K, Inc.
RCD9000 Red Colorant	Sun Chemical
Bolster Plant Growth Supplement	Natural Fertilizer of America, Inc.
Horta-Sorb	Horticultural Alliance, Inc.
Borrechel FE 853 Powder	LignoTech USA, Inc
Optimize Gold	EMD Crop BioScience
Zeba	Absorbent Technologies, Inc.
Color Coat Yellow	Becker Underwood, Inc.
Color Coat Blue	Becker Underwood, Inc.
Color Coat Green	Becker Underwood, Inc.

2.0 REGULATORY APPLICABILITY

A review of state and local air quality regulations is provided in Table 2-1. Each regulation is described in the following sections. Included in Appendix C is the completed federal regulatory applicability PTC form.

Table 2-1 Regulatory Applicability Summary

	Program Description	Regulatory Citation	Applicable
2.1	National Ambient Air Quality Standards (NAAQS)- (dispersion modeling)	40 CFR Part 50	No
2.2	Title V Operating Permit	40 CFR Part 70	No
2.3	Air Pollutants (NESHAPs)	40 CFR Parts 61, 63	No
2.4	New Source Review (NSR)	40 CFR Part 52	No
2.5	New Source Performance Standards (NSPS)	40 CFR Part 60	No
2.6	Acid Rain Requirements	40 CFR Parts 72–78	No
2.7	Risk Management Programs For Chemical Accidental Release Prevention	40 CFR Part 68	No
2.8.	State Rules		
2.8.1	Certification of Documents	IDAPA 58.01.01.123	Yes
2.8.2	Excess Emissions	IDAPA 58.01.01.130-136	Yes
2.8.3	Demonstration of Preconstruction Compliance with Toxic Standards	IDAPA 58.01.01.210	Yes
2.8.4	Ambient Air Quality Standards for Specific Air Pollutants	IDAPA 58.01.01.577	Yes
2.8.5	Toxic Air Pollutants	IDAPA 58.01.01.585 and 586	Yes
2.8.6	Open Burning	IDAPA 58.01.01.600-616	Yes
2.8.7	Visible Emissions	IDAPA 58.01.01.625	Yes
2.8.8	Rules for Control of Fugitive Dust	IDAPA 58.01.01.650	Yes
2.8.9	Fuel Burning Equipment	IDAPA 58.01.01.676	Yes

2.8.10	Particulate Matter	IDAPA 58.01.01.701	Yes
2.8.11	Odors	IDAPA 58.01.01.775-776	Yes

2.1 National Ambient Air Quality Standards (NAAQS)

Primary National Ambient Air Quality Standards (NAAQS) are identified in 40 CFR Part 50 and define levels of air quality, which the United States Environmental Protection Agency (USEPA) deems necessary to protect the public health. Secondary NAAQS define levels of air quality, which the USEPA judges necessary to protect public welfare from any known, or anticipated adverse effects of a pollutant. Examples of public welfare include protecting wildlife, buildings, national monuments, vegetation, visibility, and property values from degradation due to excessive emissions of criteria pollutants.

Specific standards for the following pollutants have been promulgated by USEPA: PM10, SO2, NOx, CO, ozone, and lead. The Summit Caldwell facility will emit PM, PM10, SO2, NOx, CO, and VOCs, a precursor to ozone. The facility is a minor source with respect to PSD and Title V as it will not exceed any major source thresholds.

2.2 Title V (Part 70) Operating Permit

Title V of the Clean Air Act (CAA) created the federal operating permit program. These permitting requirements are codified in 40 CFR Part 70. These permits are required for major sources with a PTE (considering federally enforceable limitations) greater than 100 tpy for any criteria pollutant, 25 tpy for all hazardous air pollutants (HAPs) in aggregate, or 10 tpy of any single HAP. Summit will qualify as a minor source and will be exempt from a Title V operating permit.

2.3 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

Two sets of National Emissions Standards for Hazardous Air Pollutants (NESHAPs) may potentially apply to the Summit Caldwell facility. The first NESHAP regulations were developed under the auspices of the original CAA. These standards are codified in 40 CFR Part 61, and address a limited number of pollutants and industries. 40 CFR Part 61 regulations do not apply to this planned facility.

Newer regulations are codified in 40 CFR Part 63 under the authority of the 1990 Clean Air Act Amendments (CAAA). These standards regulate HAP emissions from specific source categories and typically affect only major sources of HAPs. Part 63 regulations are frequently called Maximum Achievable Control Technology (MACT) standards. Major HAP sources have the PTE 10 tpy or more of any single HAP or 25 tpy or more of all combined HAP emissions. At the Summit Caldwell facility, potential emissions of individual HAPs will be less than 10 tpy and

combined HAP emissions will be less than 25 tpy. Therefore, the facility is not subject to 40 CFR Part 63.

2.4 New Source Review (NSR) Requirements

Canyon County is designated as an attainment area for all criteria pollutants. Therefore, the prevention of significant deterioration (PSD) regulations codified in 40 CFR Part 52 could potentially apply to the proposed facility. The PSD rule applies to: (1) a new major source that has the potential to emit 100 tons per year or more for any criteria pollutant for a facility that is one of the 28 industrial source categories listed in 40 CFR § 52.21(b)(1)(i)(a); or (2) a new major source that has the potential to emit 250 tons per year or more if the facility is not on the list of industrial source categories; or (3) a modification to an existing major source that results in a net emission increase greater than a PSD significant emission rate as specified in 40 CFR § 52.21 (b)(23)(i); or (4) a modification to an existing minor source that is major in itself. The facility's PTE does not exceed the major source threshold for any criteria pollutants. Therefore, Summit is not subject to PSD regulations.

2.5 New Source Performance Standards (NSPS)

New Source Performance Standards (NSPS) in 40 CFR Part 60 are applicable to new, modified, or reconstructed stationary sources that meet or exceed specified applicability thresholds. The new equipment proposed for this are not subject to any NSPS regulations.

2.6 Acid Rain Requirements

The acid rain requirements codified in 40 CFR Parts 72-78 apply only to utilities and other facilities that combust fossil fuel and generate electricity for wholesale or retail sale. The proposed facility will not produce electrical power for sale. Therefore, the facility is not subject to the acid rain provisions and will not require an acid rain permit.

2.7 Risk Management Programs for Chemical Accidental Release Prevention

The facility is not subject to the Chemical Accidental Release Prevention Program and will not be required to develop a Risk Management Plan (RMP). Facilities that produce, process, store, or use any regulated toxic or flammable substance in excess of the thresholds listed in 40 CFR Part 68 must develop a RMP. The facility does not store any regulated toxic or flammable substances in excess of the applicable thresholds. A RMP is not necessary for this facility.

2.8 State Rules

The Idaho Administrative Procedure Act (IDAPA) promulgates several emissions regulations that apply to Summit in addition to those listed above.

2.8.1 Certification of Documents

IDAPA 58.01.01.123 requires all documents including application forms for permits to construct, records, and monitoring reports submitted to the Department shall contain a certification by a responsible official. Summit will comply with this requirement and the appropriate certifications by a responsible official are being submitted with this application.

2.8.2 Excess Emissions

IDAPA 58.01.01.130-136 establishes procedures and requirements to be implemented in all excess emissions events. Summit will comply with the procedures and requirements outlined in Section 131-136 and submit the necessary information and reports to DEQ related to excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

2.8.3 Demonstration of Preconstruction Compliance with Toxic Standards

IDAPA 58.01.01.210 establishes requirements for preconstruction compliance with toxic standards. Summit will comply with this rule by identifying the toxic pollutants emitted in the new seed coating process line and new combustion equipment.

As described in Section 3.0 Emission Summary, Summit conservatively used a mass balance method to identify and quantify the toxic pollutants emitted from the new seed coating process line. For those toxic pollutants that are solids, the controlled emission rate utilizes a 99.9% baghouse collection efficiency (0.00073 gr/dscf) for particulate TAPs and a seed coating transfer efficiency of 95%. The uncontrolled emission rates of volatile toxic pollutants was calculated based on the maximum amount of seed and coating that can be processed during a given hour of operation. Summit has also estimated and modeled the ambient concentrations for those toxics which exceeded their respective emission screening levels. A complete modeling report is included in Attachment D which documents how Summit demonstrates preconstruction compliance with toxic air quality preconstruction standards.

2.8.4 Ambient Air Quality Standards for Specific Air Pollutants

IDAPA 58.01.01.577 establishes ambient air quality standards for specific air pollutants including PM-10, Sulfur Dioxide, Ozone, Nitrogen Oxide, Carbon Monoxide, Fluorides and Lead. Summit has demonstrated compliance with these standards and documentation of compliance is included in Attachment D.

2.8.5 Toxic Air Pollutants

IDAPA 58.01.01.585 and 586 establishes requirements for compliance with toxic air pollutants. Summit demonstrates compliance with the standards in the modeling report included in Attachment D.

2.8.6 Open Burning

IDAPA 58.01.01.600 and 616 establishes requirements for open burning. Summit does not expect to conduct open burning at the facility however will comply with the requirements under Section 600-616 if any allowable burning is to be conducted at the facility.

2.8.7 Visible Emission Limitation

IDAPA 58.01.01.625 restricts discharge of air pollutants into the atmosphere which is greater than 20% opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period. Summit will comply with this rule by conducting monthly facility-wide inspections of potential sources of visible emissions, during daylight hours and under normal operating conditions. The inspection will consist of a see/no see evaluation for each potential source. If any visible emissions are observed Summit will take corrective action or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. Summit will keep records onsite documenting the monthly visible emission inspection and Method 9 test conducted.

2.8.8 Rules for Control of Fugitive Dust

IDAPA 58.01.01.650 requires that all reasonable precautions be taken to prevent the generation of fugitive dust. Summit will continue to comply with fugitive particulate matter regulations. Fugitive dust emissions resulting from vehicle traffic on paved roads at the facility are expected to increase do to the addition of the new production line. These emissions have been included in the PTC forms.

2.8.9 Fuel Burning Equipment – Particulate Matter

IDAPA 58.01.01.677 restricts any fuel burning source of less than 10 MMBtu to limit the PM released from combustion to 0.015 gr/dscf for gas fuel. The new fluidized bed dryers and new hot water heater will each comply by burning natural gas only.

Table 2.8-1
Grain Loading Emissions – Natural Gas

Source	PM Emission Factor (lb/scf)	Gas Volume @ 3% O_2 (dscf/MMBTU)	Combustion Volume of 1 cubic feet of gas (dscf/scf)	Grain Loading (grain/dscf)	Grain Loading Standard (grain/dscf)	Meet Grain Loading Standard?
Hot Water Boiler	7.6×10^{-6}	1.11×10^{-4}	11.63	4.58×10^{-3}	0.015	Yes
Fluidized Bed Dryer	7.6×10^{-6}	1.11×10^{-4}	11.63	4.58×10^{-3}	0.015	Yes

2.8.10 Particulate Matter

IDAPA 58.01.01.701 promulgates restrictions on PM for the entire facility based on process weight. Summit will comply with this rule by using baghouse filters and dust control practices to limit the facility's emission.

Table 2.8-2
Process Weight Calculations

Source Description	Process Weight, PW (lb/hr)	Process Weight Rate Limitations - E (lb/hr)	PM-10 Emissions - Actual (lb/hr)	In Compliance? (Y/N)
New Baghouse #3	470	1.80	0.47	Y

$E = 0.045(PW)^{0.60}$, for PW less than 9,250 lb/hr.
E = Emission Limit

2.8.11 Odors

IDAPA 58.01.01.775-776 requires no emissions of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution. Summit will comply with this requirement by keeping records of all odor complaints received and will take appropriate action for each complaint which has merit.

3.0 EMISSION SUMMARY

A summary of the potential emissions for the new equipment associated with the new seed coating line is presented in Table 3-1. Emission calculations have been completed for: PM, PM10, SO2, NOx, VOCs, CO, and both individual and combined hazardous air pollutants. Detailed emission calculations are included in Appendix A. Permit application forms are included as Appendix C.

Table 3-1 Summit Seed New Coating Line PTE

PM (tpy)	PM_{10} (tpy)	SO_2 (tpy)	NO_x (tpy)	VOC (tpy)	CO (tpy)	Individual HAP (tpy)	Combined HAP (tpy)
2.33	2.33	0.02	3.54	0.19	2.97	1.24	1.31

Table 3-2 Summit Seed Facility Wide PTE

PM (tpy)	PM_{10} (tpy)	SO_2 (tpy)	NO_x (tpy)	VOC (tpy)	CO (tpy)	Individual HAP (tpy)	Combined HAP (tpy)
2.85	2.85	0.13	7.87	0.60	5.72	1.29	1.36

Particulate emissions from the new Carbotech® pulse baghouse were calculated utilizing two separate methods which resulted in similar overall emissions. The higher of the two emission calculation methods was conservatively used to demonstrate compliance with ambient air quality standard for PM10 and particulate TAPs.

The first calculation method is based on a mass balance and utilizes a 99.9% baghouse collection efficiency and seed coating transfer efficiency of 95%. The second method is based on the maximum air flow rate through the baghouse and the grainloading of the filter bags. The filter bag grainloading was conservatively assumed to be 0.00073 gr/dscf to estimate the maximum potential emissions. However, the filter bag manufacturer, Southern Felt Company has provided documentation which shows the actual grainloading for the polyester filter bags planned may have a much lower grainloading of 0.0001 gr/dscf. The grainloading documentation is located in Appendix A and is based on emission test results utilizing ASTM D6830-02 Standard Test Method for Characterizing the Pressure Drop and Filtration Performance of Cleanable Filter

Media. This test method determines the performance of filter media and the results can be used for design and selection of filter media. Although, the results obtained by this test method may not predict absolute performance, Southern Felt Company does believe the results are representative for Summit's operations. As a conservative effort, Summit is requesting permit limits slightly higher than these test results provided by Southern Felt Company to allow flexibility to utilize filter bags provided by different manufacturers.

4.0 PROPOSED EMISSION LIMITS

Summit proposes the following limits on Potential to Emit for the new equipment associated with the new seed coating line. These proposed emission limits coincide with the data utilized in the ambient air modeling included in Appendix D which demonstrates compliance with ambient air quality standards.

4.1 Fluidized Bed Dryer

The following operating limit is being requested for the new Oliver Fluidized Bed Dryers. The Oliver Fluidized Bed Dryers shall be limited to a total combined heat rating of less than 8.0 MMBtu/hr and combustion of natural gas only. Emission calculations were calculated based on natural gas combustion for 8,760 hours per year and have demonstrated compliance with ambient air quality standards therefore no additional operational limits are being requested.

4.2 Baghouse #3

The following emission limits are being requested for the new Carbotech® pulse baghouse. The filter bags used in the baghouse shall have a grainloading of no more than 0.00073 gr/dscf. The air flow rate through the baghouse shall be less than or equal to 75,000 cfm. Emission calculations were calculated based the above mentioned parameters and have demonstrated compliance with ambient air quality standards therefore no additional operational limits are being requested.

4.3 Hot Water Boiler

The following emission limits are being requested for the new 9.5 Hp Hot Water Boiler. The new Hot Water Boiler shall be limited to a total output of 9.5 Hp and combustion of natural gas only. Emission calculations were calculated based on natural gas combustion for 8,760 hours per year and have demonstrated compliance with ambient standards therefore no additional operational limits are being requested.

4.4 Pressure Washer

The following emission limits are being requested for the existing pressure washer. The pressure washer shall be limited to a total of 2,000 hours per year combusting diesel fuel. Summit will maintain a log onsite used to record the hours of operation for the pressure washer. The log will be kept to ensure the hours of operation do not exceed 2,000 hours per rolling 12-month period. Emission calculations were calculated based on 2,000 hours per year and have demonstrated compliance with ambient standards. No additional operational limits are being requested.

APPENDIX A

EMISSION CALCULATIONS
FILTER BAG DOCUMENTATION

CRITERIA POLLUTANTS NEW EQUIPMENT PTE

Source Description	NOx Emissions		CO Emissions		PM-10 Emissions		SOx Emissions		VOC Emissions		Lead Emissions	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
New Hot Water Boiler (9.5 hP)	0.038	0.168	0.032	0.141	0.0029	0.0127	0.00023	0.00101	0.0021	0.0092	1.9E-07	8.4E-07
Fluidized Bed Dryer[a]	0.769	3.369	0.646	2.830	0.0585	0.2561	0.00462	0.02022	0.0423	0.1853	3.8E-06	1.7E-05
Carbo-Tech Baghouse					0.469	2.06						
EQUIPMENT	**0.81**	**3.54**	**0.68**	**2.97**	**0.53**	**2.33**	**0.00**	**0.02**	**0.04**	**0.19**	**4.0E-06**	**1.8E-05**

[a]Exhaust Through Baghouses. Dryer consists of 3 separate natural gas burners with a maximun total rating of 8 MMBtu/hr

CRITERIA POLLUTANTS EXISTING EQUIPMENT PTE

Source Description	NOx Emissions		CO Emissions		PM-10 Emissions		SOx Emissions		VOC Emissions		Lead Emissions	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
8 Space Heaters	0.16	0.68	0.13	0.57	0.012	0.05	0.0009	0.004	0.009	0.038	7.8E-07	3.4E-06
Office Furnace	0.02	0.09	0.02	0.07	0.001	0.01	0.0001	0.001	0.001	0.005	9.7E-08	4.3E-07
Hot Water Boiler[b]	0.002	0.008	0.002	0.007	0.0001	0.0006	0.00001	0.00005	0.0001	0.0005	9.7E-09	4.2E-08
Propane Tank									0.03	0.13		
Fluidized Bed Burner[a]	0.49	2.13	0.41	1.79	0.04	0.16	0.003	0.01	0.03	0.12	2.4E-06	1.1E-05
Pressure Washer	1.43	1.43	0.31	0.31	0.10	0.10	0.09	0.09	0.117	0.12	0.0E+00	0.0E+00
Baghouse North[a]					0.023	0.10						
Baghouse South					0.023	0.10						
TOTAL EMISSIONS FROM EXISTING FACILITY	**2.10**	**4.34**	**0.87**	**2.75**	**0.197**	**0.52**	**0.10**	**0.11**	**0.18**	**0.41**	**3.32E-06**	**1.45E-05**

[a]Exhaust Through Baghouses. Baghouse control efficiency 99.99% for PM_{10}

[b]To be replaced by new 9.5 hP hot water boiler. Not included in facility wide total emissions

FACILITY-WIDE TOTAL EMISSIONS	**2.90**	**7.87**	**1.54**	**5.72**	**0.73**	**2.85**	**0.10**	**0.13**	**0.23**	**0.60**	**0.00**	**0.00**

CRITERIA EMISSIONS - NATURAL GAS COMBUSTION - SUMMIT SEED COATING

Emission Factors

NOx	100 lb/10^6 scf	AP-42, Table 1.4-1, 1998
CO	84 lb/10^6 scf	AP-42, Table 1.4-1, 1998
PM-10	7.6 lb/10^6 scf	AP-42, Table 1.4-2, 1998
SOx	0.6 lb/10^6 scf	AP-42, Table 1.4-2, 1998
VOC	5.5 lb/10^6 scf	AP-42, Table 1.4-2, 1998
Lead	0.0005 lb/10^6 scf	AP-42, Table 1.4-2, 1998

			Pounds per Hour					
Description	Capacity (Btu/hr)	Throughput (scf/hr)	NOx Emissions (lb/hr)	CO Emissions (lb/hr)	PM-10 Emissions (lb/hr)	SOx Emissions (lb/hr)	VOC Emissions (lb/hr)	Lead Emissions (lb/hr)
Hot Water Boiler	398,000	382.69	0.038	0.032	0.003	0.000	0.002	1.91E-07
Fluidized Bed Dryer[a]	8,000,000	7,692.31	0.769	0.646	0.058	0.005	0.042	3.85E-06
		TOTAL=	**0.808**	**0.678**	**0.061**	**0.005**	**0.044**	**4.04E-06**

			Ton per Year					
Description	Capacity (Btu/hr)	Hours of Operation (hr/yr)	NOx Emissions (tpy)	CO Emissions (tpy)	PM-10 Emissions (tpy)	SOx Emissions (tpy)	VOC Emissions (tpy)	Lead Emissions (tpy)
Hot Water Boiler	398,000	8,760.00	0.17	0.14	0.01	0.00	0.01	8.38E-07
Fluidized Bed Dryer	8,000,000	8,760.00	3.37	2.83	0.26	0.02	0.19	1.68E-05
		TOTAL=	**3.54**	**2.97**	**0.27**	**0.02**	**0.19**	**1.77E-05**

[a] Dryer consists of 4 separate natural gas burners with a maximum total rating of 8 MMBtu/hr

PARTICULATE EMISSIONS - NEW BAGHOUSE- SUMMIT SEED COATING

Method One- Mass Balance

Description	Byproduct Captured (lb/hr)[a]	Control Factor (%)	Control Factor Reference	PM-10 Emissions (lb/hr)	PM-10 Emissions (T/yr)
Carbo-Tech Baghouse	469.5	99.9	Manf. Guarantee - Carbotech, 12/24/07 email	0.469	2.06
			TOTAL =	**0.469**	**2.06**

[a]From mass balance- maximum rate of material processed is 9390 lb/hr limestone and assuming conservative 95% coating transfer efficiency.

Method Two- Grainloading

Description	Air Flow Rate (cfm)	Emission Guarantee (gr/dscf)[b]	Control Factor Reference	PM-10 Emissions (lb/hr)	PM-10 Emissions (T/yr)
Carbo-Tech Baghouse- Southern Felt Filters	75,000	0.00073	Southern Felt Company filter bag guarantee	0.469	2.06
			TOTAL =	**0.469**	**2.06**

[b]Southern Felt Company documentation provides a guarantee of 0.0001 gr/dscf however as a conservative estimate 99.9% control with a max of 0.0007 gr/dscf was used for emission calculations.

FUGITIVE PARTICULATE EMISSIONS - PAVED ROADS- SUMMIT SEED COATING

Description	Particle Size Multiplier k1 (lb/VMT)	Silt Loading (g/m^2)[b]	Average Vehicle Weight (tons)	Number of Day in Avg. Period (N)	Number of Days with 0.01 in Precip. (P)	Emission Factor (lb/VMT)	VMT/yr	Emissions (tpy)	Emissions (lb/hr)
Trucks	0.016	12	10	365	90	0.293	206	0.030	0.007
							TOTAL =	**0.030**	**0.007**

[a] EF PM10= $[k1(sL/2)^{0.65*} (W/3)^{1.5}] * (1-P/4N)$

[b] Table 13.2.1-4, AP-42 Recommended silt loading for concrete batching.

TOXIC AIR POLLUTANTS (TAPs) COMBUSTION CALCULATIONS
SUMMIT SEED COATINGS

New Emission Unit	Fuel Usage
Hot Water Boiler	382.69 scf/hr
Fluidized Bed Dryer	7,692.31 scf/hr

NON-CARCINOGENS (POUNDS PER HOUR)

Pollutant	CAS #	EF for Natural Gas Combustion (lb/10^6 scf)[a]	TAP Emissions (lb/hr)
Antimony	7440-36-0	0.0E+00	0.00E+00
Barium	7440-39-3	4.4E-03	3.55E-05
Chromium	7440-47-3	1.4E-03	1.13E-05
Cobalt	7440-48-4	8.4E-05	6.78E-07
Copper	7440-50-8	8.5E-04	6.86E-06
Ethylbenzene	100-41-4	0.0E+00	0.00E+00
Fluoride (as F)	16984-48-8	0.0E+00	0.00E+00
Hexane	110-54-3	1.8E+00	1.45E-02
Manganese	7439-96-5	3.8E-04	3.07E-06
Mercury	7439-97-6	2.6E-04	2.10E-06
Molybdenum	7439-98-7	1.1E-03	8.88E-06
Naphthalene	91-20-3	6.1E-04	4.93E-06
Pentane	109-66-0	2.6E+00	2.10E-02
Phosphorous	7723-14-0	0.0E+00	0.00E+00
Selenium	7782-49-2	2.4E-05	1.94E-07
1,1,1-Trichloroethane	71-55-6	0.0E+00	0.00E+00
Toluene	108-88-3	3.4E-03	2.75E-05
o-Xylene	1330-20-7	0.0E+00	0.00E+00
Zinc	7440-66-6	2.9E-02	2.34E-04

CARCINOGENS (POUNDS PER HOUR)

Pollutant	CAS #	EF for Natural Gas Combustion (lb/10^6 scf)[a]	TAP Emissions (lb/hr)
Arsenic	7440-38-2	2.0E-04	1.62E-06
Benzene	71-43-2	2.1E-03	1.70E-05
Beryllium	7440-41-7	1.2E-05	9.69E-08
Cadmium	7440-43-9	1.1E-03	8.88E-06
Chromium VI	7440-47-3	0.0E+00	0.00E+00
Formaldehyde	50-00-0	7.5E-02	6.06E-04
Nickel	7440-02-0	2.1E-03	1.70E-05
Benzo(a)pyrene	50-32-8	1.2E-06	9.69E-09
Benz(a)anthracene	56-55-3	1.8E-06	1.45E-08
Benzo(b)fluoranthene	205-82-3	1.8E-06	1.45E-08
Benzo(k)fluoranthene	205-99-2	1.8E-06	1.45E-08
Chrysene	218-01-9	1.8E-06	1.45E-08
Dibenzo(a,h)anthracene	53-70-3	1.2E-06	9.69E-09
Indeno(1,2,3-cd)pyrene	193-39-5	1.8E-06	1.45E-08
Total PAHs		1.1E-05	9.21E-08

[a]EFs from AP-42, Tables 1.4-3 and 1.4-4, 7/98

[b]EFs from AP-42, Table 1.3-10, 9/98

Processed Material Parameters - Summit Seed Coatings

Name of Material	Manufacturer	MSDS Sheet Date	TAPs or HAPs?	Max Application Rate (lb/hr)
Calcium Carbonate White (Limestone)[a]	Columbia River Carbonates	2004	Yes	9390
Calcium Carbonate Grey (Limestone)	J.A. Jack & Sons, Inc.	2004	Yes	9390
Calcium Sulfate (Gypsum)[b]	Diamond K, Inc.	2007	Yes	5850
Peat Based Inoculant[c]	EMD/ Nitragen Co.	2003	Yes	156
Polyvinyl Alcohol[d]	Kell Chemical	2007	Yes	189
Mica (Gimsheen 40)[e]	Georgia Industrial Minerals, Inc	2005	Yes	120
Maxim 4FS Fungicide[f]	Syngenta	2001	Yes	0.41
Sodium Molybdate[g]	North Metal & Chemical	2005	Yes	19.5
42-S Thiram Fungicide[h]	Bayer CropScience	2007	Yes	57.9
Apron XL LS	Syngenta	2004	No	-
Potassium Sulfate (Sulfate of Potash)	Diamond K, Inc.	2007	No	-
RCD9000 Red Colorant	Sun Chemical	2007	No	-
Bolster Plant Growth Supplement	Natural Fertilizer of America, Inc.	2003	No	-
Horta-Sorb	Horticultural Alliance, Inc.	2006	No	-
Borrechel FE 853 Powder	LignoTech USA, Inc	2006	No	-
Optimize Gold	EMD Crop BioScience	2007	No	-
Zeba	Absorbent Technologies, Inc.	2006	No	-
Color Coat Yellow	Becker Underwood, Inc.	2003	No	-
Color Coat Blue	Becker Underwood, Inc.	2007	No	-
Color Coat Green	Becker Underwood, Inc.	2007	No	-

[a]Calcium carbonate grey and calcium carbonate white are never run simultaneously. White limestone contains < 1% crystalline silica.

Max limestone process rate based on 6 batches centipede per hour @ 1565 lb/batch

[b]Max gypsum process rate based on 6.5 batches alfalfa per hour @ 900 lb/batch

[c]Max peat based inoculant process rate based on 6.5 batches alfalfa per hour @ 24 lb/batch

[d]Max polyvinyl alcohol process rate based on 6 batches centipede per hour @ 350 lb/batch and 9%

[e]Max mica process rate based on 6 batches centipede per hour @ 20 lb/batch

[f]Max Maxim 4FS Fungicide process rate based on 6.5 batches riviera per hr @ 0.8 liq oz per batch = 5.2 liq oz per hr SG= 1.22

[g]Max Sodium Molybdate process rate based on based on 6.5 batches alfalfa per hour @ 3 lb/batch

[h]Max 42-S Thiram process rate based on 6.5 batches alfalfa per hr @ 120 liq oz per batch = 780 liq oz per hr SG= 0.73

TAP Emission Calculations of Process Byproduct - Summit Seed Coatings

Name of Material/ TAPs	Max Material Process Rate (lb/hr)	Transfer Efficiency (%)[a]	Wt. Fraction TAP	Baghouse Collection Efficiency (%)[b]	TAP Emissions (lb/hr)	TAP Emissions (ton/yr)
Calcium Carbonate (Limestone)	9390.0	95%	0.99	99.9%	0.46	2.04
Silica Quartz (Limestone)	9390.0	95%	0.01	99.9%	0.0047	0.02
Calcium Sulfate (Gypsum)	5850.0	95%	1.0	99.9%	0.29	1.28
Crystalline Silica (Peat Based Inoculant)	156.0	95%	0.01	99.9%	0.0001	0.0003
Methyl Acetate (Polyvinyl Alcohol)	189.0	95%	0.01	-	0.0945	0.4139
Methanol (Polyvinyl Alcohol)	189.0	95%	0.03	-	0.2835	1.2417
Mica (Mica)	120.0	95%	1.0	99.9%	0.01	0.03
Ethylene Glycol (Maxim 4FS Fungicide)	0.41	95%	0.11	-	0.0023	0.0099
Molybdenum Soluble Compounds (Sodium Molybdate)	19.5	95%	1.00	99.9%	0.001	0.004
Thiram (42-S Thiram Fungicide)	57.9	95%	0.42	-	1.22	5.3256

[a]Estimated seed coating transfer efficiency provided by Summit

[b]Collection efficiency only for power coatings, potential vapors from liquid coatings are not controlled by the baghouse

PARTICULATE TAPS - BAGHOUSE EMISSIONS FROM SILO LOADING

Pollutant	Throughput (T/hr)	Mass Fraction (lb/lb)	Emission Factor (lb/T)[b]	Emission Control (%)	TAP Emissions (lb/hr)	TAP Emissions (T/yr)
Calcium Carbonate (Limestone)	50	0.99	0.46	99.9	0.023	0.100
Crystalline Silica (Limestone)[a]	50	0.01	0.46	99.9	0.00023	0.001

[a]Crystalline silica is <1% in calcium carbonate

[b]From AP-42, Table 11.12-2 Cement Unloading to Elevated Storage Silo

TOXIC AIR POLLUTANT EMISSION INVENTORY - SUMMIT SEED COATINGS

NON-CARCINOGENS

Pollutant	Hourly Emissions[a]	Screening Level	Modeling?	Emissions
	(lb/hr)	(lb/hr)	(Y/N)	(tons/yr)
Antimony	0.00E+00	3.3E-02	No	0.0E+00
Barium	3.55E-05	3.3E-02	No	1.6E-04
Calcium Carbonate	4.88E-01	6.7E-01	No	2.1E+00
Calcium Sulfate	2.93E-01	6.7E-01	No	1.3E+00
Chromium	1.13E-05	3.3E-02	No	5.0E-05
Cobalt	6.78E-07	3.3E-03	No	3.0E-06
Crystalline Silica	5.00E-03	6.7E-03	No	2.2E-02
Copper	6.86E-06	6.7E-02	No	3.0E-05
Ethylbenzene	0.00E+00	2.9E+01	No	0.0E+00
Ethylene Glycol	2.26E-03	8.5E-01	No	9.9E-03
Fluoride	0.00E+00	1.67E-01	No	0.0E+00
Hexane	1.45E-02	1.2E+01	No	6.4E-02
Manganese	3.07E-06	3.33E-01	No	1.3E-05
Mercury	2.10E-06	3.E-03	No	9.2E-06
Methanol	2.84E-01	17.3	No	1.24
Methyl Acetate	9.45E-02	40.7	No	4.1E-01
Mica	6.00E-03	0.2	No	2.6E-02
Molybdenum (insoluble)	8.88E-06	6.67E-01	No	3.9E-05
Molybdenum (soluble)	9.75E-04	3.33E-01	No	4.3E-03
Naphthalene	4.93E-06	3.33E+00	No	2.2E-05
Pentane	2.10E-02	1.18E+02	No	9.2E-02
Phosphorous	0.00E+00	7.E-03	No	0.0E+00
Selenium	1.94E-07	1.3E-02	No	8.5E-07
1,1,1 - Trichlorethane (Methyl Chloroform)	0.00E+00	1.27E+02	No	0.0E+00
Thiram	1.22	3.33E-01	Yes	5.33
Toluene	2.75E-05	2.5E+01	No	1.2E-04
o-Xylene	0.00E+00	2.9E+01	No	0.0E+00
Zinc	2.34E-04	6.67E-01	No	1.0E-03

CARCINOGENS

Pollutant	Max. Hourly Emissions	Screening Level	Modeling?	Emissions
	(lb/hr)	(lb/hr)	(Y/N)	(tons/yr)
Arsenic	1.62E-06	1.5E-06	Yes	1.31E-09
Benzene	1.70E-05	8.0E-04	No	6.97E-09
Beryllium	9.69E-08	2.8E-05	No	5.27E-10
Cadmium	8.88E-06	3.7E-06	Yes	4.14E-09
Chromium VI	0.00E+00	5.6E-07	No	4.88E-10
Formaldehyde	6.06E-04	5.1E-04	Yes	2.49E-07
Nickel	1.70E-05	2.7E-05	No	7.46E-09
Benzo(a)pyrene	9.69E-09	2.0E-06	No	3.98E-12
Benz(a)anthracene	1.45E-08	NA	NA	5.98E-12
Benzo(b)fluoranthene	1.45E-08	NA	NA	5.98E-12
Benzo(k)fluoranthene	1.45E-08	NA	NA	5.98E-12
Chrysene	1.45E-08	NA	NA	5.98E-12
Dibenzo(a,h)anthracene	9.69E-09	NA	NA	3.98E-12
Indeno(1,2,3-cd)pyrene	1.45E-08	NA	NA	5.98E-12
Total PAHs	9.21E-08	2.00E-06	No	3.79E-11

[a] Hourly TAP emissions are the sum of natural gas combustion and process byproduct emission rates.

HAPs Inventory

Pollutant	Emissions (tons/yr)
Arsenic	1.31E-09
Benzene	6.97E-09
Beryllium	5.27E-10
Cadmium	4.14E-09
Ethylbenzene	0.0E+00
Formaldehyde	2.49E-07
Chromium	4.88E-10
Lead	1.77E-05
Mercury	9.2E-06
Methanol	1.2E+00
Naphthalene	2.2E-05
Nickel	7.46E-09
Selenium	8.5E-07
Toluene	1.2E-04
Xylene	0.0E+00
Phosphorus	0.0E+00
POM	3.12E-06
Dichlorobenzene	4.24E-05
Hexane	6.37E-02
Total	**1.31E+00**

Note: Emission Factors for lead, POM, dichlorobenzene and hexane are as		
Lead	5.00E-04	lb/MMscf
POM	8.82E-05	lb/MMscf
Dichlorobenzene	1.20E-03	lb/MMscf
Hexane	1.8	lb/MMscf

Melissa Armer

Full Name:	Industrial Filtration
First Name:	Industrial
Job Title:	Rep
Company:	Industrial Filtration
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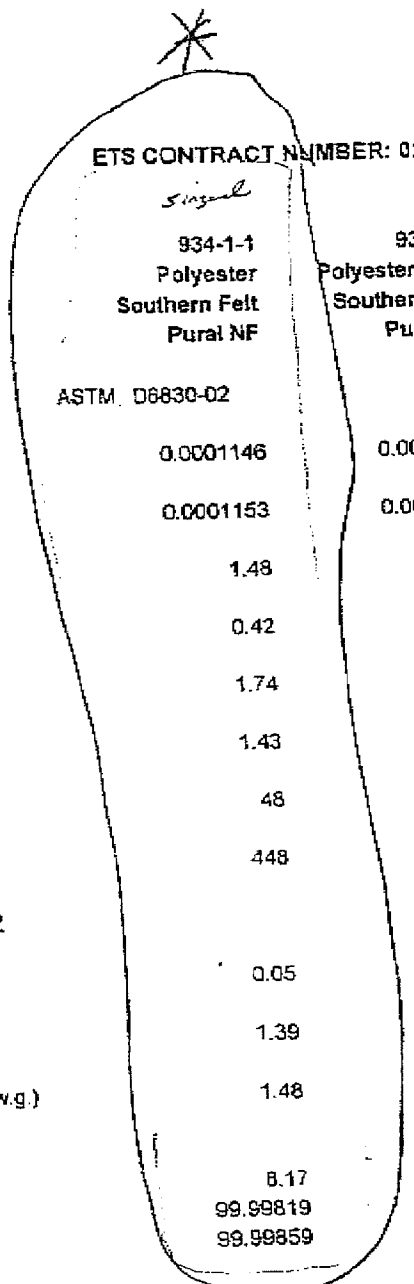
Bag material:
Southern Felt Company, Inc
Northeast Office, P.O. Box 545
Westerley, RI 02891
(401) 596-4921
(800) 754-8457 Ext 1712
Fax (401) 596-7929
J.E. Weeden, Business Mgr.

New Bag
$ 13.45

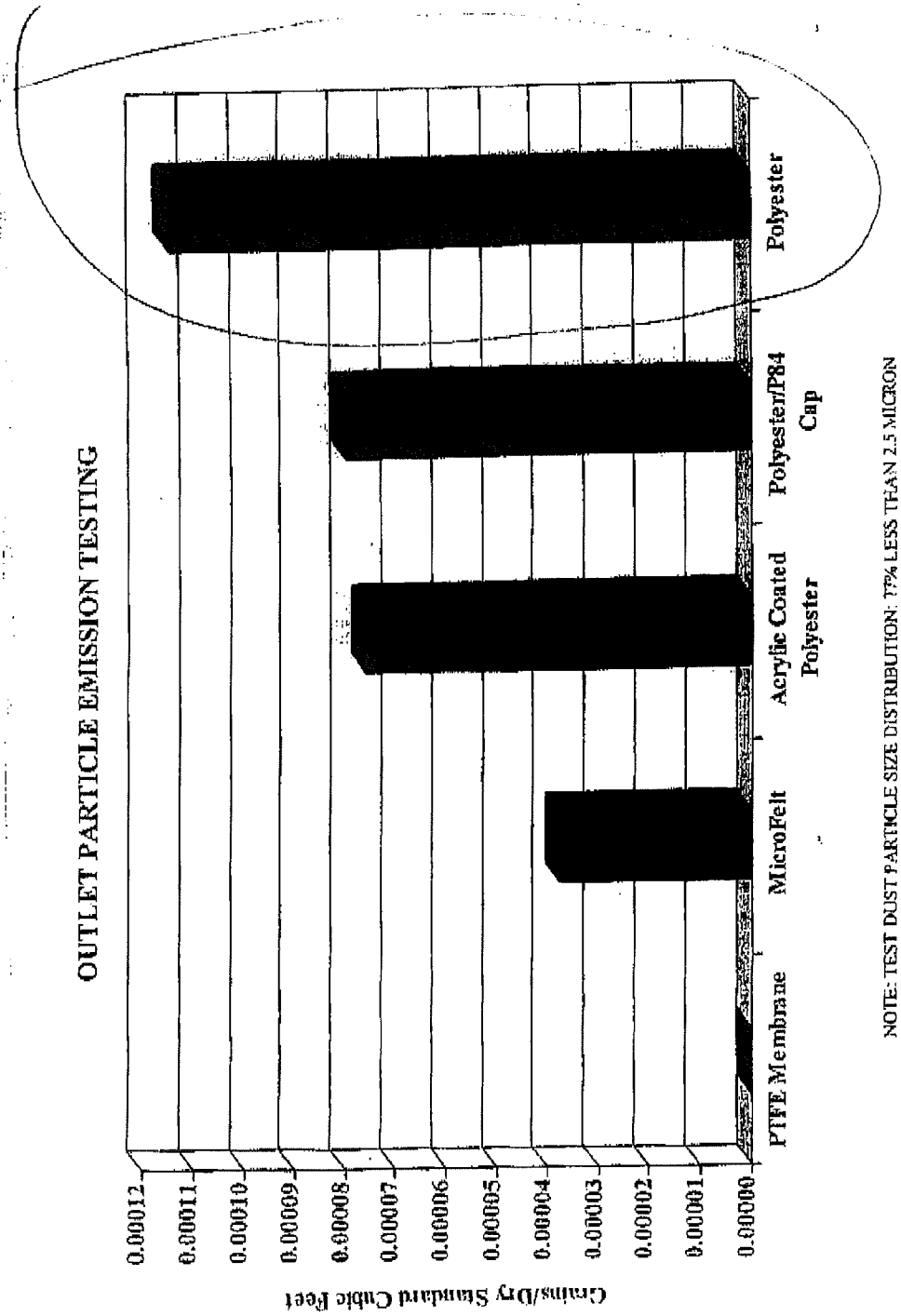
ATTN
Stu Barclay
209-455-8040



ETS CONTRACT NUMBER: 02-934 DATE 10/28/02

RUN ID.	934-1-1	934-2-1	934-3-1	934-4-1	934-10-1
FABRIC DESIGNATION	Polyester	Polyester / P84	MicroFelt / PE	CAC / Polyester	CTF / Polyester
MANUFACTURER	Southern Felt	Southern Felt	Southern Felt	Southern Felt	Southern Felt
DUST FEED	Pural NF	Pural NF	Pural NF	Pural NF	Pural NF
VERIFICATION TEST RESULTS	ASTM D6830-02				
Mean Outlet Particle Conc. PM 2.5 (gr/dscf)	0.0001146	0.0000800	0.0000376	0.0000745	0.0002105
Mean Outlet Particle Conc. Total mass (gr/dscf)	0.0001153	0.0000800	0.0000376	0.0000759	0.0002167
Initial Residual Pressure Drop (in. w.g.)	1.48	1.44	1.76	3.11	2.18
Change in Residual Pressure Drop (in. w.g.)	0.42	0.50	0.23	1.91	1.46
Average Residual Pressure Drop (in. w.g.)	1.74	1.75	1.90	4.34	3.08
Mass Gain of Filter Sample (g)	1.43	2.08	0.74	0.68	1.37
Average Filtration Cycle Time (s)	48	49	89	6	7
Number of Pulses	448	445	241	3599	3157
RESIDUAL PRESSURE DROP					
At Start of: Conditioning Period (in. w.g.)	0.05	0.06	0.12	0.08	0.04
Recovery Period (in. w.g.)	1.39	1.30	1.72	3.13	2.19
Performance Test Period (in. w.g.)	1.48	1.44	1.76	3.11	2.18
REMOVAL EFFICIENCY (%)					
Dust Conc (gr/dscf)	8.17	7.73	7.39	7.43	6.99
PM 2.5 *	99.99819	99.99866	99.99934	99.99870	99.99811
Total Mass **	99.99859	99.99897	99.99949	99.99898	99.99890

* (Dust Concentration * 0.7735) - PM 2.5 Outlet Concentration * 100
Dust Concentration * 0.7735


OUTLET PARTICLE EMISSION TESTING
Grains/Dry Standard Cubic Feet
0.00012
0.00011
0.00010
0.00009
0.00008
0.00007
0.00006
0.00005
0.00004
0.00003
0.00002
0.00001
0.00000
PTFE Membrane
MicroFelt
Acrylic Coated Polyester
Polyester/P84 Cap
Polyester
NOTE: TEST DUST PARTICLE SIZE DISTRIBUTION: 77% LESS THAN 2.5 MICRON

[redacted]

1

FELT SPECIFICATION

Style PE-16-SPEC

Date 4/21/03

Construction: SCRIM SUPPORTED NEEDLEFELT

Composition: 100% SCRIM SUPPORTED POLYESTER FELT WITH A GLAZE ONE SIDE FINISH.

Finish: HEATSET, GLAZED ONE SIDE.

Weight: 15.00- 17.00 ozs./yd.²

Thickness: 0.0550- 0.0750 in.

Air Permeability: 20.00- 40.00 Cfm at ½in. W.G.

Minimum Breaking Strength: Warp: 75 Filling: 150 lbs.

Elongation: % at 10 lbs./2 in.

Minimum Mullen Bursting Strength: 400 lbs./in.²

Dimensional Stability: 3.00 % maximum lineal shrinkage @ 300° For 2 Hours

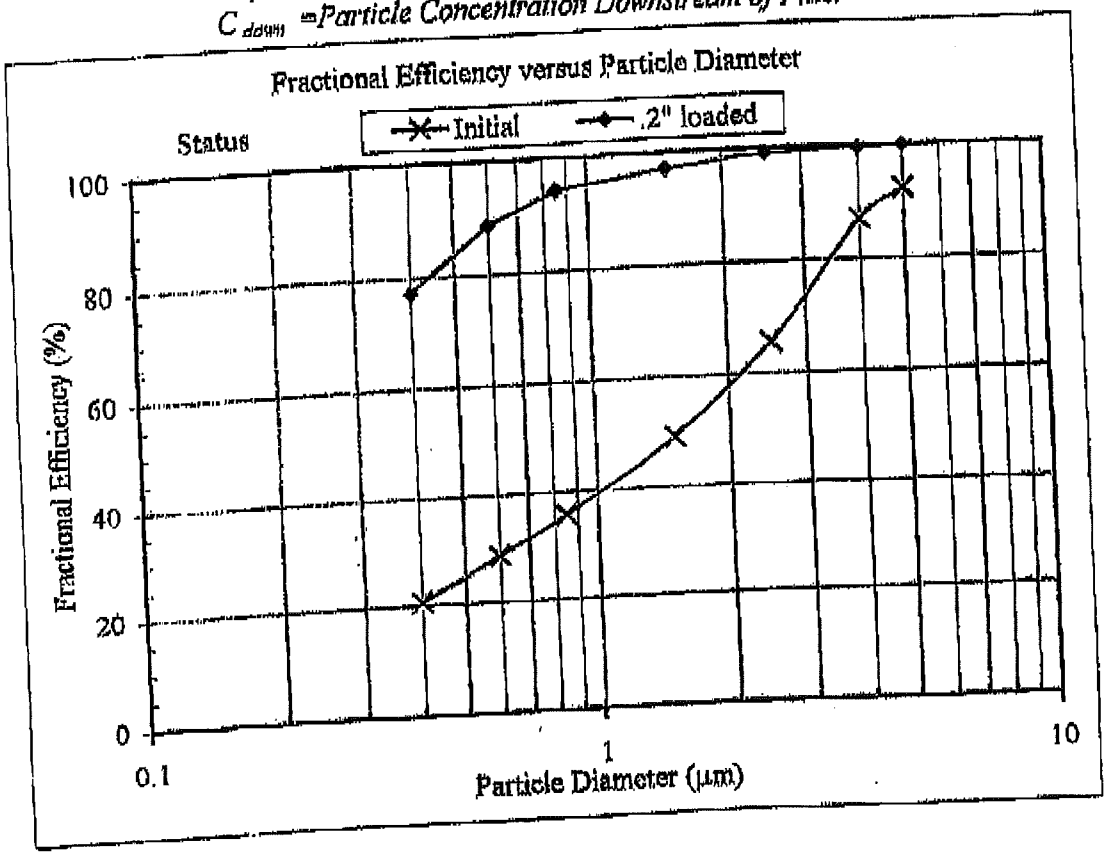
Date : October 29, 2002
Test ID: 16 oz Eggshell-
Test Type : Fractional Efficiency
Test Aerosol : KCL, Neutralized

Requested By:
Bay Area Filtration
Manufacturer:
Velocity: 10fpm

Status	Initial	2" loaded
Δp (" H_2O)	0.190	0.390
Size Range (µm)	Fractional Efficiency (%)	
0.3-0.5	20.6	77.2
0.5-0.7	28.6	88.6
0.7-1.0	35.6	94.1
1.0-2.0	49.1	97.0
2.0-3.0	65.5	99.1
3.0-5.0	87.0	99.6
>5.0	92.3	100.0

$$F_{eff} = \frac{C_{up} - C_{down}}{C_{up}} x100\%$$

F_{eff} = *Fractional Efficiency*
C_{up} = *Particle Concentration Upstream of Filter*
C_{down} = *Particle Concentration Downstream of Filter*



TEST SUPERVISOR
MICK PLOM

ENGINEERING APPROVAL
K.C.KWOK, PH.D.

Melissa Armer

From: Matt Ineck [matt_summit@qwest.net]
Sent: Monday, December 24, 2007 9:54 AM
To: Milissa Armer
Subject: FW: Emissions Warranty

-----Original Message-----
From: Graham Sims [mailto:sims@carbo-tech.com]
Sent: Monday, December 24, 2007 7:21 AM
To: Matt Ineck
Subject: Re: Emissions Warranty

Stu,

Based on the information provided you could expect filter efficiencies of up to 99.9% on particulate that is 2.5 micron or larger, 10 micron sized particles will have higher efficiencies - providing the collector is operated under optimum conditions per OEM instructions.

Trust this information is sufficient. Please contact me should you have any questions or require further information.

Best regards,
Graham Sims
CARBO-Tech Group, Inc
905-681-1921 ext. # 229

---- Original Message -----

From: Matt Ineck
To: Stu Barclay ; sims@carbo-tech.com
Sent: Thursday, December 20, 2007 7:03 PM
Subject: RE: Emissions Warranty

1 Drying seed coatings on seed
2 seed coating particles (mainly limestone) 3 78 lbs per cubic ft
4 90-110 degrees F
5 90-120 degrees F
6 less than 8%
7 filing for a permit with D.E.Q. they are concerned about efficiency for 10 micron & above
8 11,945 ft square feet
9 6.3:1
10 75000 cfm
11 Filter Bags PT # 6410-1555-13-B-03-01 (per Gareth Urwins Quote)

-----Original Message-----
From: Stu Barclay [mailto:stu_summit@qwest.net]
Sent: Monday, December 17, 2007 11:02 AM
To: 'Matt Ineck'
Subject: FW: Emissions Warranty

Stu Barclay
Summit Seed Coatings

QUOTATION

AM INDUSTRIAL
Machinery Merchants

Attn: Mr. Stu Barclay
Summit Seed Coatings
710 N. 11th Avenue
Caldwell, ID 83605

October 22, 2007
Ref: H1021

Dear Stu,

We are pleased to offer the following for your consideration:

(1) CARBO-TECH 75,000 cfm insulated baghouse-type dust collection system—used—AM6055
Model: 39-15-13-11945 *New in 1999*

- Holds (585) 13' long filter bags (removed)
- Total Cloth Area: 11,945 ft²
- Air to Cloth Ratio @ 75,000 cfm: 6.3:1
- Automatic Pulse Clean System with Photohelic differential pressure switch and sequencing timer board in enclosure
- Insulated Clean Air Plenum, Dirty Air Plenum, and Hopper section with sheet metal cladding
- Walk-In Clean Air Service Plenum
- Exterior Pulse Clean Header with (39) Double Diaphragm valves
- Steel Support Structure
- (2) Hopper Access Doors
- Screw Conveyor Discharge and drive
- Complete set 13' wire cages

- Includes: Waltz-Holst 250 HP Blower – Size 45P Heavy Duty
  Capable of 75,000 cfm @ 12" static pressure
  250 HP, 460 Volt, 3 Phase motor, Allen Bradley Soft Starter

DISCOUNTED SYSTEM PRICE, LOADED ON TRUCKS,
FOB ST. CATHERINES, ONTARIO, CANADA.....**$59,000.00**

This system is owned outright by A M Industrial, disassembled and available for immediate loading, subject to prior sale. The blower ships from Cleveland, Ohio. Please note the photos show (2) systems, ducted together, side-by-side. The 75,000 cfm system proposed is (1) of the (2) modules shown.

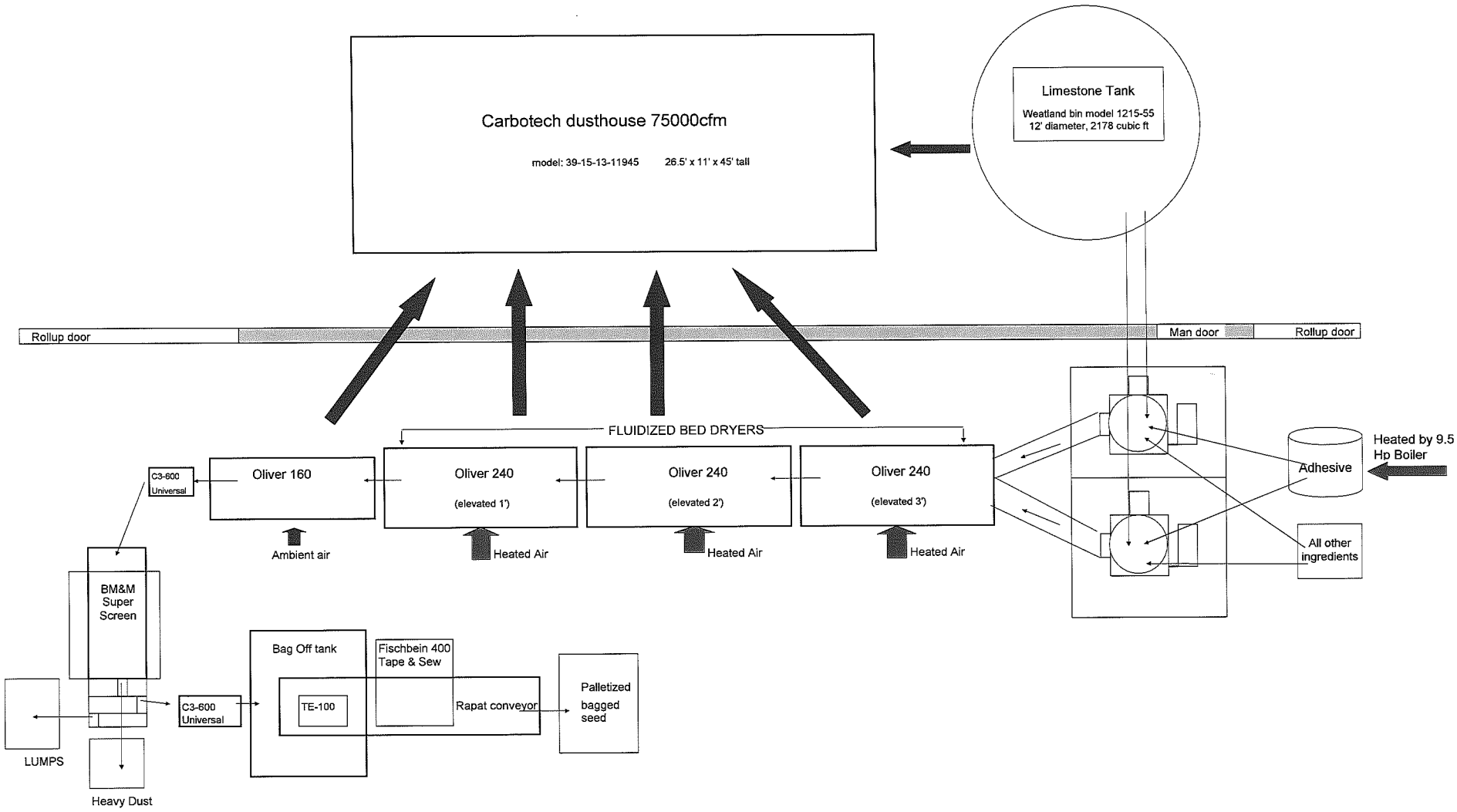
Sincerely,
A M INDUSTRIAL

Curtis Wyman

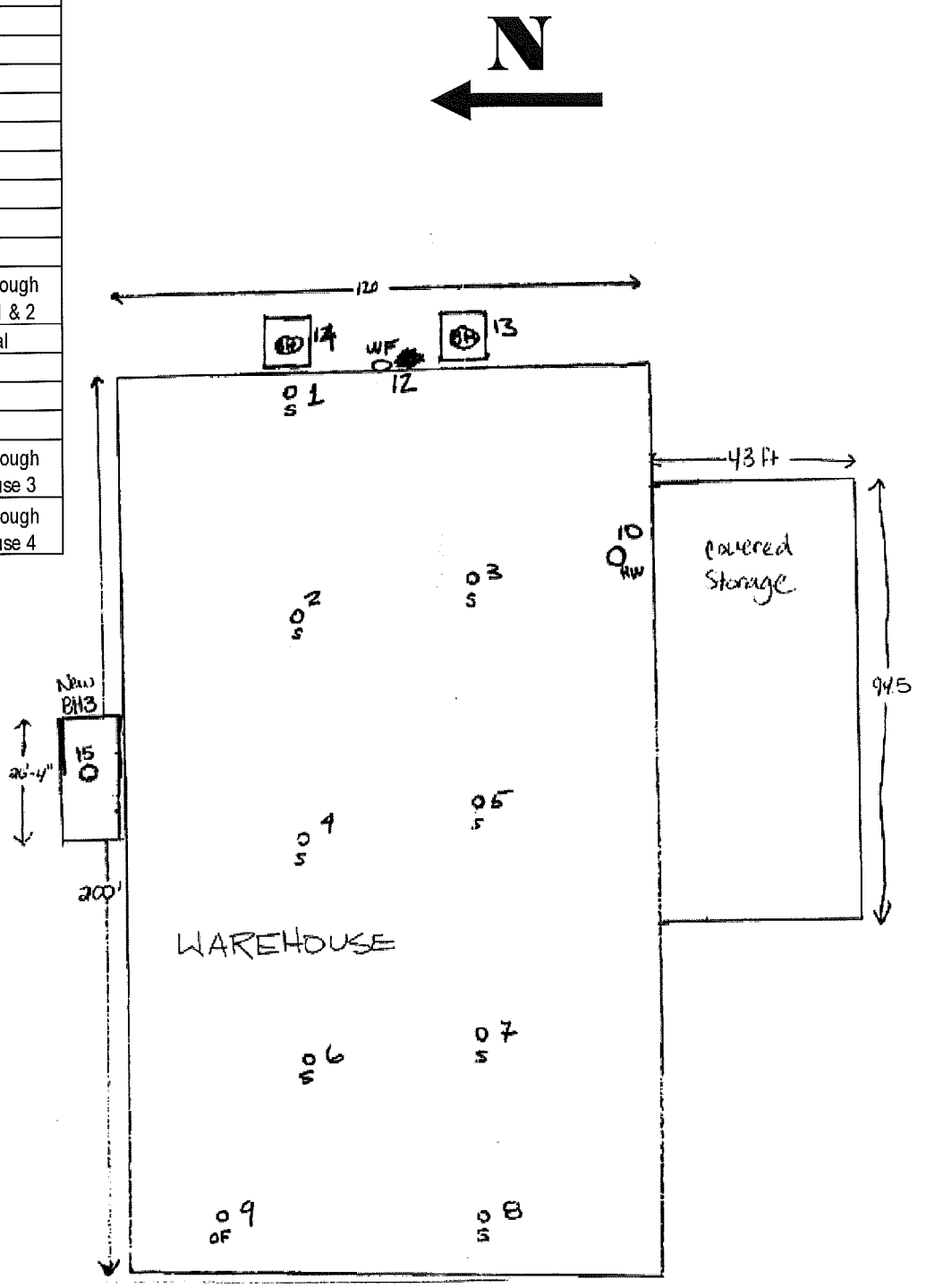
13200 Enterprise Avenue
Cleveland, Ohio
44135-5104
(216) 433-7171
(888) 825-5788
(216) 433-4008 Fax

APPENDIX B

PROCESS FLOW DIAGRAM
STACK LOCATION MAP
SCALED PLOT PLAN


Carbotech dusthouse 75000cfm
model: 39-15-13-11945 26.5' x 11' x 45' tall
Limestone Tank
Weatland bin model 1215-55
12' diameter, 2178 cubic ft
Rollup door
Man door
Rollup door
FLUIDIZED BED DRYERS
C3-600 Universal
Oliver 160
Oliver 240
(elevated 1')
Oliver 240
(elevated 2')
Oliver 240
(elevated 3')
Adhesive
Heated by 9.5 Hp Boiler
Ambient air
Heated Air
Heated Air
Heated Air
All other ingredients
BM&M Super Screen
Bag Off tank
Fischbein 400 Tape & Sew
TE-100
Rapat conveyor
Palletized bagged seed
C3-600 Universal
LUMPS
Heavy Dust

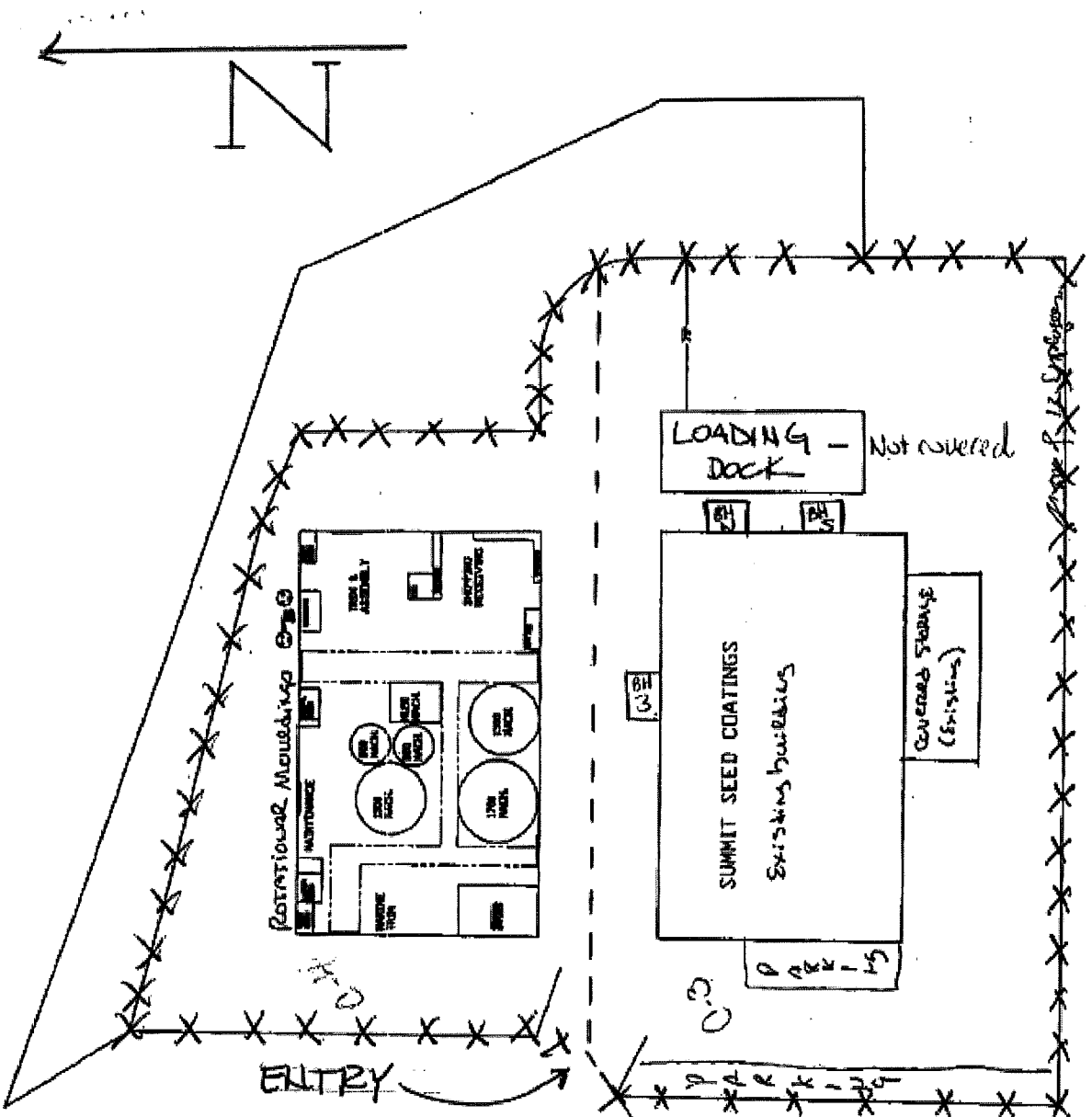
Stack No.	Stack ID	Exit Direction
1	Space Heater 1	Vertical
2	Space Heater 2	Vertical
3	Space Heater 3	Vertical
4	Space Heater 4	Vertical
5	Space Heater 5	Vertical
6	Space Heater 6	Vertical
7	Space Heater 7	Vertical
8	Space Heater 8	Vertical
9	Office Furnace	Vertical
10	New Hot Water Boiler	Vertical
11	Fluidized Bed Burner	Exhaust Through Baghouses 1 & 2
12	Pressure Washer	Horizontal
13	Baghouse 1	Vertical
14	Baghouse 2	Vertical
15	New Baghouse 3	Vertical
	New Fluidized Bed Dryer	Exhaust Through New Baghouse 3
	Lime Silo #2	Exhaust Through New Baghouse 4



SCALE

1in = 27 ft

SUMMIT STACK LOCATIONS


N
LOADING DOCK
Not covered
SUMMIT SEED COATINGS
Existing buildings
Covered storage (Existing)
Rotational Moulding
ENTRY
SUMMIT SEED COATINGS
AMBIENT AIR BOUNDARY
* UTM Coordinates at entry *
UTM N 4834 849
UTM E 526 034
FENCE LINE
FICTITIOUS PROPERTY BOUNDARY AGREED UPON IN LEASE
SCALE: 1 INCH = 75.9 FEET

APPENDIX C

PTC APPLICATION FORMS

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 1
01/11/07

Please see instructions on page 2 before filling out the form.

DEQ USE ONLY
Date Received
Project Number
Payment / Fees Included? Yes ☐ No ☐
Check Number

COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER

1. Company Name	Summit Seed Coatings		
2. Facility Name	Caldwell Facility	3. Facility ID No.	2700090
4. Brief Project Description - One sentence or less	PTC for additional seed coating line		

PERMIT APPLICATION TYPE

5. ☐ New Facility ☒ New Source at Existing Facility ☐ Unpermitted Existing Source
☒ Modify Existing Source: Permit No.: T2-030054
Date Issued: July 12, 2004
☐ Required by Enforcement Action: Case No.: _____

6. ☒ Minor PTC ☐ Major PTC

FORMS INCLUDED

Included	N/A	Forms	DEQ Verify
☒	☐	Form GI – Facility Information	☐
☒	☐	Form EU0 – Emissions Units General: 2	☐
☐	☒	Form EU1 - Industrial Engine Information Please Specify number of forms attached: _____	☐
☐	☒	Form EU2 - Nonmetallic Mineral Processing Plants Please Specify number of forms attached: _____	☐
☐	☒	Form EU3 - Spray Paint Booth Information Please Specify number of forms attached: _____	☐
☐	☒	Form EU4 - Cooling Tower Information Please Specify number of forms attached: _____	☐
☒	☐	Form EU5 – Boiler Information Please Specify number of forms attached: 2	☐
☐	☒	Form HMAP – Hot Mix Asphalt Plant Please Specify number of forms attached: _____	☐
☐	☒	Form CBP - Concrete Batch Plant Please Specify number of forms attached: _____	☐
☒	☐	Form BCE - Baghouses Control Equipment	☐
☐	☒	Form SCE - Scrubbers Control Equipment	☐
☒	☐	Forms EI-CP1 - EI-CP4 - Emissions Inventory– criteria pollutants (Excel workbook, all 4 worksheets)	☐
☒	☐	PP – Plot Plan	☐
☒	☐	Forms MI1 – MI4 – Modeling (Excel workbook, all 4 worksheets)	☐
☒	☐	Form FRA – Federal Regulation Applicability	☐

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 1
01/11/07

*Please see instructions on page **Error! Bookmark not defined.** before filling out the form.*

All information is required. If information is missing, the application will not be processed.

IDENTIFICATION	
1. Company Name	Seed Enhancements LLC DBA, Summit Seed Coatings
2. Facility Name (if different than #1)	Summit Seed Coatings- Caldwell Facility
3. Facility I.D. No.	2700090
4. Brief Project Description:	PTC for additional seed coating line

FACILITY INFORMATION	
5. Owned/operated by: (√ if applicable)	☐ Federal government ☐ County government ☐ State government ☐ City government
6. Primary Facility Permit Contact Person/Title	Stuart Barclay- President
7. Telephone Number and Email Address	208-455-8009 stu_summit@qwest.net
8. Alternate Facility Contact Person/Title	Matthew Ineck- Plant Manager
9. Telephone Number and Email Address	208-455-8009 matt_summit@qwest.net
10. Address to which permit should be sent	P.O. Box E
11. City/State/Zip	Caldwell, ID 83606
12. Equipment Location Address (if different than #9)	710 N 11th Ave.
13. City/State/Zip	Caldwell, ID 83605
14. Is the Equipment Portable?	☐ Yes ☒ No
15. SIC Code(s) and NAISC Code	Primary SIC: 0723 Secondary SIC (if any): NAICS: 115114
16. Brief Business Description and Principal Product	Seed Treatment Processing Plant
17. Identify any adjacent or contiguous facility that this company owns and/or operates	

PERMIT APPLICATION TYPE	
18. Specify Reason for Application	☐ New Facility ☒ New Source at Existing Facility ☒ Modify Existing Source: Permit No.: Permit T2-030054 Date Issued: July 12, 2004 ☐ Unpermitted Existing Source: ☐ Required by Enforcement Action: Case No.:

CERTIFICATION

IN ACCORDANCE WITH IDAPA 58.01.01.123 (RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO), I CERTIFY BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION IN THE DOCUMENT ARE TRUE, ACCURATE, AND COMPLETE.

19. Responsible Official's Name/Title: Stuart Barclay / President

20. RESPONSIBLE OFFICIAL SIGNATURE: Stuart Barclay Date: 15 February 2008

21. ☒ Check here to indicate you would like to review a draft permit prior to final issuance.

Emissions Unit - General **Form EU0**

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 1
01/11/07

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

Company Name:	Facility Name:	Facility ID No:
Summit Seed Coatings	Caldwell Facility	2700090
Brief Project Description:	PTC for additional seed coating line	

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

1. Emissions Unit (EU) Name:	COATING LINE #2
2. EU ID Number:	LINE 2
3. EU Type:	☐ New Source ☐ Unpermitted Existing Source ☒ Modification to a Permitted Source -- Previous Permit #: T2-030054 Date Issued: July 12, 2004
4. Manufacturer:	VARIOUS
5. Model:	VARIOUS
6. Maximum Capacity:	
7. Date of Construction:	AS SOON AS PERMIT IS ISSUED
8. Date of Modification (if any)	AS SOON AS PERMIT IS ISSUED
9. Is this a Controlled Emission Unit?	☐ No ☒ Yes If Yes, Complete the following section. If No, go to line 18.

EMISSIONS CONTROL EQUIPMENT

10. Control Equipment Name and ID:	Baghouse #3 BH3		
11. Date of Installation:		12. Date of Modification (if any):	
13. Manufacturer and Model Number:	CARBO-Tech		
14. ID(s) of Emission Unit Controlled:	FBD 2, LINE 2, SILO 2		
15. Is operating schedule different than emission units(s) involved?:	☐ Yes ☒ No		
16. Does the manufacturer guarantee the control efficiency of the control equipment?	☒Yes ☐No (If yes, attach and label manufacturer guarantee)		

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency	99.9%	99.9%				

17. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

18. Actual Operation	
19. Maximum Operation	24 hr/day, 8,760 hr/yr

REQUESTED LIMITS

20. Are you requesting any permit limits?	☒ Yes ☐ No (If Yes, check all that apply below)
☐ Operation Hour Limit(s):	
☐ Production Limit(s):	
☐ Material Usage Limit(s):	
☐ Limits Based on Stack Testing	Please attach all relevant stack testing summary reports
☒ Other:	Bag filter grainloading shall be less than 0.00073 gr/dscf
21. Rationale for Requesting the Limit(s):	Compliance demonstrated utilizing 99.9% control efficiency and 0.00073 gr/dscf grainloading for filter bag

Emissions Unit - General **Form EU0**

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 1
01/11/07

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

Company Name:	Facility Name:	Facility ID No:
Summit Seed Coatings	Caldwell Facility	2700090
Brief Project Description:	PTC for additional seed coating line	

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

1. Emissions Unit (EU) Name:	LIMESTONE SILO 2
2. EU ID Number:	SILO 2
3. EU Type:	☒ New Source ☐ Unpermitted Existing Source ☒ Modification to a Permitted Source -- Previous Permit #: T2-030054 Date Issued: July 12, 2004
4. Manufacturer:	WHEATLAND
5. Model:	1215-55
6. Maximum Capacity:	50 TONS
7. Date of Construction:	AS SOON AS PERMIT IS ISSUED
8. Date of Modification (if any)	AS SOON AS PERMIT IS ISSUED
9. Is this a Controlled Emission Unit?	☐ No ☒ Yes If Yes, Complete the following section. If No, go to line 18.

EMISSIONS CONTROL EQUIPMENT

10. Control Equipment Name and ID:	Baghouse #3 BH3		
11. Date of Installation:		12. Date of Modification (if any):	
13. Manufacturer and Model Number:	CARBO-Tech		
14. ID(s) of Emission Unit Controlled:	FBD 2, LINE 2, SILO 2		
15. Is operating schedule different than emission units(s) involved?:	☐ Yes ☒ No		
16. Does the manufacturer guarantee the control efficiency of the control equipment?	☒Yes ☐No (If yes, attach and label manufacturer guarantee)		

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency	99.9%	99.9%				

17. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

18. Actual Operation	1 hr/day, 4 days/wk, 208 hr/yr
19. Maximum Operation	1 hr/day, 7 days/wk 365 hr/yr

REQUESTED LIMITS

20. Are you requesting any permit limits?	☐ Yes ☒ No (If Yes, check all that apply below)
☐ Operation Hour Limit(s):	
☐ Production Limit(s):	
☐ Material Usage Limit(s):	
☐ Limits Based on Stack Testing	Please attach all relevant stack testing summary reports
☐ Other:	
21. Rationale for Requesting the Limit(s):	

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 1
01/11/07

Please see instructions on page 2 before filling out the form.

IDENTIFICATION		
Company Name: Summit Seed Coatings	Facility Name: Caldwell Facility	Facility ID No: 2700090
Brief Project Description:	PTC for additional seed coating line	

EXEMPTION

Please see IDAPA 58.01.01.222 for a list of industrial boilers that are exempt from Permit to Construct requirements.

Boiler (EMISSION UNIT) DESCRIPTION AND SPECIFICATIONS

1. Type of Request ☒ New Unit ☐ Unpermitted Existing Unit ☐ Modification to a unit with Permit #:

2. Use of Boiler: ☒ 100% Used For Process ☐ % Used For Space Heat ☐ % Used For Generating Electricity ☐ Other:

3. Boiler ID Number: Hot Water Boiler	4. Rated Capacity: ☒ 0.398 Million British Thermal Units Per Hour (MMBtu/hr) ☐ 1,000 Pounds Steam Per Hour (1,000 lb steam/hr)	
5. Construction Date:	6. Manufacturer: Parker Industrial Boiler	7. Model: 9.5 Horsepower
8. Date of Modification (if applicable):	9. Serial Number (if available): 41030	10. Control Device (if any): **Note: Attach applicable control equipment form(s)**

FUEL DESCRIPTION AND SPECIFICATIONS

	☐ Diesel Fuel (#) (gal/hr)	☒ Natural Gas (cf/hr)	☐ Coal (unit: /hr)	☐ Other Fuels (unit: /hr)
11. Fuel Type				
12. Full Load Consumption Rate		383		
13. Actual Consumption Rate		383		
14. Fuel Heat Content (Btu/scf)		1040		
15. Sulfur Content wt%		N/A		
16. Ash Content wt%		N/A		

STEAM DESCRIPTION AND SPECIFICATIONS

17. Steam Heat Content	NA	NA		
18. Steam Temperature (°F)	N/A	N/A		
19. Steam Pressure (psi)	N/A	N/A		
20. Steam Type	N/A	N/A	☐ Saturated ☐ Superheated	☐ Saturated ☐ Superheated

OPERATING LIMITS & SCHEDULE

21. Imposed Operating Limits (hours/year, or gallons fuel/year, etc.): 8,760 hr/yr 3.36 MMscf/yr

22. Operating Schedule (hours/day, months/year, etc.):

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
04/02/07

Please see instructions on page 2 before filling out the form.

IDENTIFICATION		
Company Name: Summit Seed Coatings	**Facility Name:** Caldwell Facility	**Facility ID No.:** 2700090
Brief Project Description:		

IDENTIFICATION				BAGHOUSE			BAGS			
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Emission Unit	**EU ID No.**	**CE ID No.**	**Stack ID No.**	**Baghouse Manufacturer**	**Baghouse Model No.**	**Type**	**Type**	**Size (Dia x Ht)**	**No. of Bags**	**Air to Cloth**
Baghouse #3	BH3	BH3	15	CARBO-Tech	39-15-13-11945	Reverse Air Pulse	Polypropylene	6" x 13'	585	6.3: 1

DEQ AIR QUALITY PROGRAM
1410 N. Hilton
Boise, ID 83706
For assistance: (208) 373-0502

PERMIT TO CONSTRUCT APPLICATION

Company Name:	Summit Seed Coatings
Facility Name:	Caldwell Facility
Facility ID No.:	2700090
Brief Project Description:	PTC for additional seed coating line

SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - POINT SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Emissions units	Stack ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Source(s)													
Space Heater 1	1	0.0015	0.0065	0.0001	0.0005	0.0195	0.0853	0.0164	0.0716	0.0011	0.0047	0.0000001	0.00000043
Space Heater 2	2	0.0015	0.0065	0.0001	0.0005	0.0195	0.0853	0.0164	0.0716	0.0011	0.0047	0.0000001	0.00000043
Space Heater 3	3	0.0015	0.0065	0.0001	0.0005	0.0195	0.0853	0.0164	0.0716	0.0011	0.0047	0.0000001	0.00000043
Space Heater 4	4	0.0015	0.0065	0.0001	0.0005	0.0195	0.0853	0.0164	0.0716	0.0011	0.0047	0.0000001	0.00000043
Space Heater 5	5	0.0015	0.0065	0.0001	0.0005	0.0195	0.0853	0.0164	0.0716	0.0011	0.0047	0.0000001	0.00000043
Space Heater 6	6	0.0015	0.0065	0.0001	0.0005	0.0195	0.0853	0.0164	0.0716	0.0011	0.0047	0.0000001	0.00000043
Space Heater 7	7	0.0015	0.0065	0.0001	0.0005	0.0195	0.0853	0.0164	0.0716	0.0011	0.0047	0.0000001	0.00000043
Space Heater 8	8	0.0015	0.0065	0.0001	0.0005	0.0195	0.0853	0.0164	0.0716	0.0011	0.0047	0.0000001	0.00000043
Office Furnace	9	0.0015	0.0065	0.0001	0.0005	0.0195	0.0853	0.0164	0.0716	0.0011	0.0047	0.0000001	0.00000043
New Hot Water Boiler	10	0.0029	0.0127	0.00023	0.00101	0.038	0.168	0.032	0.141	0.0021	0.0092	1.9E-07	8.4E-07
Fluidized Bed Burner	13 & 14	0.04	0.16	0.003	0.01	0.49	2.13	0.41	1.79	0.03	0.12	2.4E-06	1.1E-05
Pressure Washer	12	0.10	0.10	0.09	0.09	1.43	1.43	0.31	0.31	0.117	0.12		
Baghouse 1	13	0.023	0.10										
Baghouse 2	14	0.023	0.10										
New Baghouse 3	15	0.469	2.06										
New Fluidized Bed Burner	15	0.0585	0.2561	0.00462	0.02022	0.769	3.369	0.646	2.830	0.0423	0.1853	3.8E-06	1.7E-05
Propane Tank										0.03	0.13		
(insert more rows as needed)													
Total		0.73	2.85	0.10	0.13	2.90	7.87	1.54	5.72	0.23	0.60	0.00	0.00

DEQ AIR QUALITY PROGRAM
1410 N. Hilton
Boise, ID 83706
For assistance: (208) 373-0502

PERMIT TO CONSTRUCT APPLICATION

Company Name:	Summit Seed Coatings
Facility Name:	Caldwell Facility
Facility ID No.:	2700090
Brief Project Description:	PTC for additional seed coating line

SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - FUGITIVE SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Fugitive Source Name	**Fugitive ID**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**
Fugitive Source(s)													
Vehicle Fugitive Dust	1.00	0.01	0.03										
... (insert more rows as needed)													
Total		0.01	0.03										

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SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - POINT SOURCES

		3.											
1.	2.	PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Emissions units	Stack ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Source(s)													
New Hot Water Boiler	10	0.0029	0.0127	0.00023	0.00101	0.038	0.168	0.032	0.141	0.0021	0.0092	1.9E-07	8.4E-07
New Baghouse 3	15	0.469	2.06										
New Fluidized Bed Burner	15	0.0585	0.2561	0.00462	0.02022	0.769	3.369	0.646	2.830	0.0423	0.1853	3.8E-06	1.7E-05
Total		0.53	2.33	0.00	0.02	0.81	3.54	0.68	2.97	0.04	0.19	0.00	0.00

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton Boise, ID 83706 **For assistance: (208) 373-0502**	**PERMIT TO CONSTRUCT APPLICATION**
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Facility Name:	Caldwell Facility	
Facility ID No.:	2700090	
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SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - FUGITIVE SOURCES

		3. Air Pollutant Maximum Change in Emissions Rate (lbs/hr or t/yr)											
1.	2.	PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Fugitive Source Name	**Fugitive ID**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**
Fugitive Source(s)													
Vehicle Fugitive Dust	1.00	0.00	0.02										
(insert more rows as needed)													
Total		0.00	0.02										

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SUMMARY OF AIR IMPACT ANALYSIS RESULTS - CRITERIA POLLUTANTS

		1.		2.	3.	4.		5.
Criteria Pollutants	**Averaging Period**	**Significant Impact Analysis Results (µg/m3)**	**Significant Contribution Level (µg/m3)**	**Full Impact Analysis Results (µg/m3)**	**Background Concentration (µg/m3)**	**Total Ambient Impact (µg/m3)**	**NAAQS (µg/m3)**	**Percent of NAAQS**
PM_{10}	24-hour	9.10	5	9.10	94.00	103.10	150	69%
	Annual	3.20	1	3.20	30.00	33.20	50	66%
SO_2	3-hr		25				1300	
	24-hr		5				365	
	Annual		1				80	
NO_2	Annual	27.20	1	27.20	32.00	59.20	100	59%
CO	1-hr		2000				10000	
	8-hr		500				40000	

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POINT SOURCE STACK PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	.7	8.	9.	10.
Emissions units	**Stack ID**	**UTM Easting (m)**	**UTM Northing (m)**	**Base Elevation (m)**	**Stack Height (m)**	**Modeled Diameter (m)**	**Stack Exit Temperature (K)**	**Stack Exit Flowrate (acfm)**	**Stack Exit Velocity (m/s)**	**Stack orientation (e.g., horizontal, rain cap)**
Point Source(s)										
Space Heater 1	1	526111.1	4834833.4	724.2	7.3152	0.203	449.7	70	1.02	Vertical- Rain Cap
Space Heater 2	2	526096.3	4834831.8	724.1	7.3152	0.203	449.7	70	1.02	Vertical- Rain Cap
Space Heater 3	3	526100.5	4834819.3	724.1	7.3152	0.203	449.7	70	1.02	Vertical- Rain Cap
Space Heater 4	4	526081.7	4834828.6	723.9	7.3152	0.203	449.7	70	1.02	Vertical- Rain Cap
Space Heater 5	5	526085.6	4834817	724	7.3152	0.203	449.7	70	1.02	Vertical- Rain Cap
Space Heater 6	6	526066.9	4834826.2	723.7	7.0104	0.203	449.7	70	1.02	Vertical- Rain Cap
Space Heater 7	7	526070.4	4834814.8	723.8	6.7056	0.203	449.7	70	1.02	Vertical- Rain Cap
Space Heater 8	8	526058.1	4834812.7	723.6	6.7056	0.203	449.7	70	1.02	Vertical- Rain Cap
Office Furnace	9	526055.5	4834830.6	723.4	7.3152	0.127	449.7	70	2.61	Vertical- Rain Cap
New Hot Water Boiler	10	526103.5	4834810.1	724.1	6.5532	0.254	533	280	2.61	Vertical- Rain Cap
Fluidized Bed Burner		Exhaust Through Baghouses 1 & 2								
Pressure Washer	12	526113.8	4834827.9	724.2	1.0668	0.244	505.4	53	0.55	Horizontal
Baghouse 1	13	526116.5	4834821.1	724.3	10.8204	0.508	321.9	16,813	39.15	Vertical- No Cap
Baghouse 2	14	526113.8	4834834.3	724.3	10.8204	0.508	321.9	16,813	39.15	Vertical- No Cap
New Baghouse 3	15	526083.9	4834843.8	723.8	13.716	1.524	321.9	75,000	19.40	Vertical- No Cap
New Fluidized Bed Burner		Exhaust Through Baghouse 3								
(insert more rows as needed)										

DEQ AIR QUALITY PROGRAM
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PERMIT TO CONSTRUCT APPLICATION

Company Name:	Summit Seed Coatings
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Facility ID No.:	2700090
Brief Project Description:	PTC for additional seed coating line

BUILDING AND STRUCTURE INFORMATION

1.	2.	3.	4.	5.	6.	7.
Building ID Number	**Length (ft)**	**Width (ft)**	**Base Elevation (m)**	**Building Height (m)**	**Number of Tiers**	**Description/Comments**
Warehouse	200.00	120.00	724.00	6.70	1	
Baghouse North	12.00	10.50	724.00	10.82	1	
Baghouse South	12.00	10.50	724.00	10.82	1	
New Baghouse #3	26.33	11.00	724.00	13.72	1	
(insert more rows as needed)						

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 1
01/11/07

Please see instructions on page 2 before filling out the form.

IDENTIFICATION		
Company Name: Summit Seed Coatings	Facility Name: Caldwell Facility	Facility ID No: 2700090
Brief Project Description: PTC for additional seed coating line		

APPLICABILITY DETERMINATION

1. Will this project be subject to 1990 CAA Section 112(g)? (Case-by-Case MACT)	☒ NO	☐ YES* * If YES then applicant must submit an application for a case-by-case MACT determination [IAC 567 22-1(3)"b" (8)]
2. Will this project be subject to a New Source Performance Standard? (40 CFR part 60)	☒ NO	☐ YES* *If YES please identify sub-part:
3. Will this project be subject to a MACT (Maximum Achievable Control Technology) regulation? (40 CFR part 63) THIS ONLY APPLIES IF THE PROJECT EMITS A HAZARDOUS AIR POLLUTANT	☒ NO	☐ YES* *If YES please identify sub-part: _____
4. Will this project be subject to a NESHAP (National Emission Standards for Hazardous Air Pollutants) regulation? (40 CFR part 61)	☒ NO	☐ YES* *If YES please identify sub-part: _____
5. Will this project be subject to PSD (Prevention of Significant Deterioration)? (40 CFR section 52.21)	☒ NO	☐ YES
6. Was netting done for this project to avoid PSD?	☒ NO	☐ YES* *If YES please attach netting calculations

IF YOU ARE UNSURE HOW TO ANSWER ANY OF THESE QUESTIONS CALL THE AIR PERMIT HOTLINE AT 877-5PERMIT